
**COSTS OF CDC, FCC, AND CONTRACTOR-
PROVIDED CARE**

In this chapter, we first present our analyses of basic CDC cost data. Then, we go on to examine some of the cross-Service and cross-installation variations in CDC operations and CDC organization that help to explain these differences. We then present per-child costs for FCC care. As was done with the CDC data, we examine some of the cross-Service and cross-installation variations that might help to explain FCC cost differences. We also examine the contribution of subsidies to FCC. We conclude with a discussion of costs in contractor-operated centers.

Our analyses assume that care provided in all settings and in all Services is of comparable quality. We are forced to make this assumption because we could not assess quality within the scope of the study. The fact that all centers included in the study are accredited makes this assumption more tenable, although it is certainly true that quality can vary considerably across accredited centers.

COSTS FOR CDC CARE

Average annual cost per child in CDC care is closely linked to a child's age, as shown in Table 4.1. This result is driven by what we know about the delivery of child care—with fewer children per caregiver permitted at younger ages, it simply costs more to care for younger children than older children. Comparing average annual cost for infants with that for preschoolers, it is apparent that costs for the former group are almost double what they are for the latter

Table 4.1
Average Annual Cost Per Child and Maximum Caregiver-to-Child Ratios in CDC Care, by Child Age

Child Age	Maximum Allowable Caregiver-to-Child Ratios ^a	Average Annual Cost
Infant (6 weeks–12 months)	1:4	\$12,133
Pre-toddler (12–23 months)	1:5	\$10,825
Toddler (24–35 months)	1:7	\$8,743
Preschool (36 months–5 years)	1:12	\$6,594
School-age (kindergarten and up) ^b	1:15	\$4,595

^aRatios are specified in Department of Defense Instruction (DoDI) 6060.2, January 19, 1993.

^bThese programs involve fewer hours of care per child, although part-day public school kindergarten programs that often last just two hours reduce the hours per child for the youngest children in this age category only slightly.

group. These huge cost differences are not surprising when one examines the Maximum Allowable Ratios column: the caregiver-to-child ratio is three times larger for preschoolers than it is for infants.

For the reasons we just described, we were not able to calculate costs on an hourly basis. However, we can use reasonable assumptions to generate a rough way of translating hourly costs into annual costs. For example, if we assume that full-time center enrollment involves 2,500 hours per year of care (10 hours a day, 5 days a week, for 50 weeks a year), we find that the cost figures that we produced from our survey are lower than those found by the GAO in its study of child-care costs in Air Force Centers (GAO, 1999). Using this multiplier, the GAO hourly cost estimates would translate into \$13,575 for infants; \$11,800 for pre-toddlers; \$9,900 for toddlers; and \$8,075 for preschoolers.

Part of the difference between our estimates and the GAO estimates is accounted for by the fact that the GAO cost figures included estimates of the rental cost of space, the value of donated time, and the value of legal services, all of which were not included in our analysis. As emphasized by the GAO study, these costs are higher than those reported by the Colorado Cost, Quality, and Child Outcomes in Child Care Centers Study (Cost, Quality, and Child Outcomes Study Team,

1995). But the reasons for these differences are understandable. The cost figures from the Colorado study are based on centers that were providing, on average, mediocre care. The Colorado study concluded that high-quality care is more costly to provide; the increment in cost to provide high-quality care depends on the preexisting quality level. Further, the Colorado study's cost estimates are based on data collected in 1993.

Table 4.2 presents average annual cost data by Service. Only a limited number of installations reported that they provided SAC in CDCs; we estimated SAC costs if the care was provided outside the CDC, as long as the care was funded with child development resources. Consequently, none of the cross-Service comparisons on SAC costs are statistically significant and we focus our discussion on younger children. As shown in Table 4.2, the annual cost per child in CDC care is highest in the Navy. Moreover, this ranking holds true for each child-age category.¹ The Marine Corps ranks lowest in per-child average cost.²

Table 4.3 reports our estimates of food costs and other costs (as described in Chapter Three). Other costs are higher in the Navy than in the other Services. These differences are statistically significant at the 5-percent level. Comparison of the Navy's other costs with those of the other Services reveals that the Navy's other costs are more than \$1,000 per child over those of the next-highest Service, the Air Force. However, the cost differential at each child age level (see Table 4.2) between the Navy's average cost and that of the Air Force, the next-highest Service, exceeds this difference. The Army's food cost per child is higher than in the Marine Corps (statistically significant at the 5-percent level), but other cross-Service differences in food costs are not significant.

¹Differences between the Navy and Air Force for infant and pre-toddler care costs are significant at the 10-percent level. All other differences are significant at the 5-percent level.

²The differences between the Marine Corps and the Navy, and between the Marine Corps and the Air Force, are significant at all age levels at the 5-percent level. The differences between Army and Marine Corps costs are not significant.

Table 4.2
Average Annual Cost Per Child in CDC Care, by Child Age and Service

Child Age	Army	Navy	Air Force	Marine Corps
Infant (6 weeks–12 months)	\$10,482	\$14,438	\$12,177	\$9,874
Pre-toddler (12–23 months)	\$9,425	\$12,900	\$10,807	\$8,737
Toddler (24–35 months)	\$7,544	\$10,596	\$8,641	\$6,982
Preschool (36 months–5 years)	\$5,585	\$8,197	\$6,449	\$5,154
School-age (kindergarten and up) ^a	\$4,710	—	\$4,167	\$4,530

^aNumbers of CDCs with school-age care programs were low: Only 11 installations provided such care (six in the Army, one in the Air Force, and four in the Marine Corps). Consequently, cross-Service comparisons for this age group should be regarded as tentative.

Table 4.3
Average Other Costs and Food Costs Per Child in CDC Care, by Service

	All Services	Army	Navy	Air Force	Marine Corps
CDC other costs	\$3,084	\$2,255	\$4,358	\$2,893	\$2,194
CDC food costs ^a	\$502	\$587	\$479	\$488	\$399

^aNot attributable to infants.

Possible explanations for Service differences in per-child CDC costs might be traced to cross-Service differences in the number of children served, the age distribution of children served, or average CDC size.³ It has been established that with a range of fixed costs (for example, the director's salary), larger centers can care for children at a lower per-child cost. Indeed, the military has identified CDC sizes below which costs per child become unacceptably high (Smith, 2000).

³Installations often operate more than one CDC. The average size of CDCs on an installation is simply the total number of children served divided by the number of CDCs at that installation. The total number of children served in CDCs on an installation differs from the average CDC size on an installation if the installation has more than one CDC.

As shown in Table 4.4, the number of children served at an installation varies considerably by Service. In particular, Army installations provide care to more children in every age group.⁴ Navy installations, which we found to have the highest per-child costs, tend to serve the fewest children.

Despite the aforementioned difference in the number of children served, the distribution of children served across age groups appears to be similar across all Services, as reflected in Table 4.5. For example, the overall percentage of preschoolers, across Services, is 50 percent. The Army's percentage, 48 percent, is slightly *below* this cross-Service average, although it is slightly higher than the Navy's 45 percent.

Although it is useful to consider the total number of children served by CDCs on an installation, the average size of CDCs might also have an important impact on costs. An installation that serves 500 children in ten centers might be less efficient than an installation that

Table 4.4
Average Number of Children in CDC Care at an Installation, by Child Age and Service

Child Age	All Services	Army	Navy	Air Force	Marine Corps
Infant (6 weeks–12 months)	27.7	47.7	20.4	21.7	17.6
Pre-toddler (12–23 months)	39.0	61.2	29.3	31.7	33.1
Toddler (24–35 months)	55.2	81.6	42.1	47.4	50.0
Preschool (36 months–5 years)	126.0	186.9	80.5	127.3	100.5
School-age (kindergarten and up) ^a	22.1	19	—	12.0	29.4
Total ^b	251.2	384.5	172.2	228.8	217.9

^aThese numbers apply only to the 11 installations that provide school-age care.

^bTotals include school-age care, if it is provided.

⁴The difference between the number of children served by Army installations and other installations is statistically significant at the 5-percent level for all age groups.

serves 500 children in two centers. Table 4.6 reports the average size (number of children served) of CDCs by Service. With an average size of 127.9, Navy centers are, on average, the smallest in the DoD. This size difference is significant at the 5-percent level for the Army and Air Force and at the 10-percent level for the Marine Corps. The average size of Army centers is 204.5, which makes them larger than both Navy centers (significant at the 5-percent level) and Air Force centers (significant at the 10-percent level).

To better understand the factors that influence CDC costs, we developed regression models for the costs for each child-age group. These regressions enable us to control for characteristics of the installation, the average size of CDCs, the affluence of the area in which the installation is located, the percentage of all children served who are infants and toddlers, and military Service. We selected these factors because it seemed plausible that each might bear on the amount of money being spent per child for care.

Table 4.5
Percentage of Children in Each Age Group in CDC Care, by Service

Child Age	All Services	Army	Navy	Air Force	Marine Corps
Infant (6 weeks–12 months)	11%	12%	12%	9%	11%
Pre-toddler (12–23 months)	15%	14%	18%	14%	15%
Toddler (24–35 months)	22%	21%	25%	20%	24%
Preschool (36 months–5 years)	50%	48%	45%	56%	45%

NOTE: Percentages do not sum to 100 because we have not included school-age care.

Table 4.6
Average Center Size, by Service

	All Services	Army	Navy	Air Force	Marine Corps
Center size (number of children served)	165.8	204.5	127.9	168.3	173.3

Remoteness seemed to be a plausible contributor because, in more-isolated areas, parents would have fewer child-care choices and CDCs might feel less of a need to compete with community-based providers for the enrollment of military children. In addition, military spouses, who constitute the majority of caregivers, may have few other alternatives to CDC jobs. At the same time, it may be more difficult to attract caregivers who are not military spouses. In one of our pretest sites, which was isolated but not technically remote, we were told that it is difficult to find and keep CDC caregivers.

Average size of CDCs on the installation was, we believed, likely to affect costs because many CDC costs are fixed. With more children in care, these costs are spread over a greater number of children, thereby reducing these costs at the per-child level.

In terms of *affluence*, it seemed plausible on its face that installations located in more-affluent areas might put more resources behind each child in care. These higher costs would be more acceptable to CDC patrons accustomed to relatively high community-care costs. Moreover, in more-affluent areas, it might prove necessary to pay higher caregiver wages and to spend more for supplies and services.⁵ Finally, because one of our research questions was whether there are differences across the Services in child-care costs, we included military Service in our model.

We summarize the regression results here; a more detailed discussion is available in Appendix B. The results of our regressions reveal that in every age group, child-care costs are positively associated with cost of living in the area: They are significantly higher in areas with a higher cost of living.⁶ Whether these findings reflect higher labor costs in these areas, or the feeling that parents will more easily

⁵Indeed, the federal government has instituted a locality pay system under which many federal civil service employees who work in high-cost-of-living areas receive a higher wage. The locality pay differential is based on the location of employment and not on residence. In FY 1998, there were 32 locality pay regions with locality pay percentages ranging from 5.42 percent (for the “Rest of U.S.” category) to 12.06 percent (for the San Francisco-Oakland-San Jose region). For FY 2000, the range was 6.78 percent to 16.98 percent. The terminology is slightly confusing because everybody gets some locality pay because one “region” encompasses the “Rest of the U.S.”

⁶We define *cost of living* with reference to the median income in the local area in which the installation is located.

tolerate being on the higher end of the DoD fee range, or some combination of these two factors or other factors, cannot be determined from our data.

The regressions also reveal that average center size is significantly related to per-child CDC costs for all age groups, with larger centers associated with lower costs. This result is consistent with the hypothesis that larger centers are able to implement more-efficient staffing procedures than smaller centers. For example, a large center and a small center might each have one floater to cover for sick caregivers or caregivers on break. The cost of this floater is spread across a greater number of “required adult caregivers” in a large center, so the cost per adult caregiver is larger by comparison in the small center. This difference in cost per required caregiver has more impact on the cost per infant than on the cost per preschool-age child because of the higher staff-to-child ratios required for younger children.

Finally, we found that per-child CDC costs were higher in the Navy and the Air Force than in the Marine Corps, even after controlling for other factors.⁷ These findings mirror those shown in Table 4.2 but make clear that these effects are not a function of differences across Services in installation affluence or remoteness, or of the number of children in CDC care.⁸

We also estimated separate regression equations for the three CDC care cost components: other costs per child, food costs per child, and direct-labor costs per child. These regressions revealed that installations with more children per center have lower other costs *and* lower direct-care labor costs. The magnitude of the impact of average center size on the two cost components is approximately the same. This suggests that larger centers are able to reduce the cost per child through economies of scale in indirect or administrative costs and

⁷There was no statistically significant difference between the Army estimates and those of the other services.

⁸One reviewer of the draft document of this report noted that higher costs in the Navy are likely due to the Navy’s tendency to use greater numbers of APF staff than the other services. While we could not test this hypothesis directly with our data, our analysis of total APF and NAF expenditures on CDP activities, presented later in this chapter, supports this notion. NAF expenditures account for 35 percent of total expenditures in the Navy and about 50 percent of the total in the other services.

through a more efficient use of direct-care staff.⁹ Service-level variables were not significant in these regression analyses of other costs, suggesting that differences in the average indirect cost by Service, reported earlier in Table 4.3, are driven by other factors, such as average center size.

The cost of living in the local area appears to impact only direct-care labor costs.¹⁰ This is not surprising in view of the fact that federal government wages are tied to a locale's cost of living through locality pay.

Our regressions also suggest that the Service differences reported earlier in this chapter are primarily driven by differences in direct-care labor costs. Direct-care labor costs per child are higher in the Navy and the Air Force than in the Marine Corps.¹¹

COSTS FOR FCC

In much the same way that we computed per-child costs for CDC care, we computed per-child costs for FCC. As shown in Table 4.7, the average annual cost per child in FCC is considerably lower than the average per-child cost of care in CDCs.

As shown in Table 4.8, per-child costs in FCC do not vary dramatically by Service or by age. Indeed, there is no statistically significant cross-Service variation in costs, and with the exception of school-age care, there is no significant variation by age. This contrasts markedly with the age and Service variation evident in CDC costs. This is due to the fact that the child-staff ratios in CDC care and FCC differ; in CDCs they increase gradually with age, whereas in FCC the key distinctions are between infants, pre-toddlers, and older children, with a cap of six children total in each FCC home. What is also noteworthy about Table 4.8 is the low "other costs," which is not surprising given that administration is necessarily off-site (although on base) and

⁹These relationships are statistically significant at the 1-percent level.

¹⁰The parameter estimate for direct-care infant labor costs on income was positive and significant at the 5-percent level.

¹¹For infants, the parameter estimates on the Air Force are positive and significant at the 5-percent level, and the estimates on the Navy are positive and significant at the 10-percent (but not at the 5-percent) level.

Table 4.7
Average Annual Cost Per Child in FCC, by Child Age

Child Age	Maximum Allowable Number of Children ^a	Average Annual Cost ^b
Infant (6 weeks–12 months)	Two, when there are also older children in the FCC household; three, when only infants are cared for in the FCC household	\$5,014
Pre-toddler (12–23 months)	Two, when there are also older children; three, when only pre-toddlers are cared for	\$5,118
Toddler (24–35 months)	Total number of children who can be cared for in an FCC household is six	\$4,609
Preschool (36 months–5 years)	Total number of children who can be cared for in an FCC household is six	\$4,512
School-age (kindergarten and up) ^c	Six, when there are also younger children; eight, when only school-age children are cared for (including the provider's own children)	\$3,293

^aIn every instance, the provider's own children under the age of eight must be counted in these figures.

^bThe entries in this column represent total cost, which includes cost to both families and the Service.

^cThese programs involve fewer hours of care per child, although part-day public school kindergarten programs that often last just two hours reduce the hours per child for the youngest children in this age category only slightly.

part-time.¹² Administrators usually consist of one or more FCC coordinators, depending on the number of homes. Coordinators are responsible for multiple FCC homes, so that the cost of their salaries is spread across multiple homes and multiple children.

A direct comparison of CDCs and FCC food costs is not appropriate because we could measure only USDA payments to providers, which don't capture the full cost of providing food to children.

¹²FCC administrators generally visit homes several times a month. Although CDC administrators spend only limited time in each classroom, they are on-site full time.

Table 4.8
Average Annual Cost Per Child in FCC, by Service^a

Child Age	All Services	Army	Navy	Air Force	Marine Corps
Infant (6 weeks–12 months)	\$5,014	\$4,713	\$5,081	\$4,922	\$5,763
Pre-toddler (12–23 months)	\$5,118	\$4,858	\$5,340	\$4,864	\$5,883
Toddler (24–35 months)	\$4,609	\$4,782	\$4,307	\$4,773	\$4,450
Preschool (36 months–5 years)	\$4,512	\$4,657	\$4,411	\$4,523	\$4,361
School-age (kindergarten and up)	\$3,293	\$3,576	\$3,121	\$3,341	\$2,830
Average FCC other costs	\$317	\$401	\$267	\$285	\$318
Average FCC food costs	\$334	\$432	\$367	\$249	\$272

^aAge categories are specified in DoDI 6060.2, January 19, 1993.

Table 4.9 presents the median percentages of children in each age group in FCC by Service. What is apparent from this table is that the age distribution in FCC homes is flatter than it is in the CDCs. The difference in percentages between the best-represented and least-represented age group is never more than 16 percent. Comparable figures for the CDC age distributions begin at 34 percent and go as high as 47 percent. Two factors appear to account for this effect. First, there are relatively more infants in FCC, although the CDC-FCC differences in this category are not large. More significantly, the percentage of preschoolers in CDCs is substantially higher than in FCC homes. This reflects the larger number of slots available in CDCs for preschool care.

As we had done with the CDC costs, we conducted regression analyses on FCC cost estimates by age group to identify any relationships between FCC costs and service, FCC costs and the cost of living in the local area, or FCC costs and remoteness. We found that income was significantly related (at the 5-percent level) to FCC costs for all age groups and to FCC other costs for all age groups. Installations located in areas with higher costs of living had higher FCC costs. Parameter

Table 4.9
Median Percentage of Children in Each Age Group in FCC, by Service

Child Age	All Services	Army	Navy	Air Force	Marine Corps
Infant (6 weeks–12 months)	14%	16%	14%	14%	13%
Pre-toddler (12–23 months)	16%	13%	20%	14%	17%
Toddler (24–35 months)	19%	19%	19%	19%	18%
Preschool (36 months–5 years)	28%	25%	29%	30%	17%
School-age (kindergarten and up)	20%	22%	20%	20%	26%

estimates on Service variables or remoteness were not significantly different from zero.

Some, but by no means all, installations offer a subsidy for FCC care in the form of a direct payment from the DoD to the FCC provider. This payment is in addition to fees paid directly by parents to the provider. As noted in Chapter Two, subsidies have been made available to FCC providers to meet a variety of policy goals, including increasing the total number of available slots, increasing the number of infant slots, and making FCC more affordable by bringing fees in line with those of the CDC. We found that, in general, FCC subsidies for age-specific care during normal hours are not in widespread use.¹³ Only 14 of the 60 installations responding to our survey indicated that they provided such a subsidy to FCC providers in fiscal year (FY) 1998. As shown in Table 4.10, most of these subsidies are targeted to infant care; only a few installations provide subsidies for preschoolers or SAC.¹⁴

¹³Included in these calculations are subsidies that apply to all children. The amount of this subsidy was applied to each age group. We are excluding here subsidies for children with special needs, subsidies for after-hours care, or subsidies for greater affordability.

¹⁴Installations that provide FCC subsidies for preschoolers also subsidize care for younger children.

Table 4.10**Provision of FCC Subsidies: Number of Subsidies by Child Age and Service**

Child Age	All Services	Army ^a	Navy	Air Force ^b	Marine Corps
Infant (6 weeks–12 months)	14 ^c	6	5	0	3
Pre-toddler (12–23 months)	8	0	5	0	3
Toddler (24–35 months)	8	0	5	0	3
Preschool (36 months–5 years)	3	0	2	0	1
School-age (kindergarten and up)	3	2	0	0	1

^aThis table focuses on subsidies for age-specific care. The Army does not provide such age-specific care subsidies to pre-toddlers, toddlers, and preschoolers.

^bAt the time of our survey, the Air Force had decided not to provide FCC subsidies as a matter of policy.

^cThis entry refers to the number of installations providing the subsidy.

As part of its Child Development System Expansion and Marketing Plan, the DoD came up with a number of initiatives—both subsidies and nonmonetary incentives—designed to increase in-home care availability and services. Notable are the Army’s Child Development Group homes and fee equity for families with Category I incomes (see Table 2.1); the Navy’s Child Development Home marketing study and provider and caregiver recruitment campaigns; the Marine Corps’ pilot effort to provide off-base FCC using nonmilitary providers; and the Air Force’s Extended Duty Child Care Program for higher housing priority and larger-housing-unit eligibility for providers. For all Services, this DoD plan suggests more use of FCC subsidies to meet multiple needs.

The size of the FCC subsidy also varied with child age, as shown in Table 4.11. Subsidies for pre-toddlers and toddlers were the highest, with the median subsidy for these groups close to \$40 a week. The higher subsidy levels for these age groups are somewhat counter-intuitive: One might expect infant subsidies to be highest because FCC regulations limit the number of infants and pre-toddlers under an FCC caregiver’s care; if the caregiver accepts three infants or three pre-toddlers, she may not care for any other children. The reason for

Table 4.11
Median FCC Subsidy Per Week, by Child Age, at Installations Providing a Subsidy

Child Age	Minimum FCC Subsidy	Median FCC Subsidy	Maximum FCC Subsidy
Infant (6 weeks–12 months)	\$6	\$21.50	\$90
Pre-toddler (12–23 months)	\$3	\$37.50	\$90
Toddler (24–35 months)	\$14	\$38.50	\$90
Preschool (36 months–5 years)	\$10	\$12.00	\$18
School-age (kindergarten and up)	\$1	\$15	\$18

NOTE: The maximum number of installations providing these subsidies was 14.

this pattern of higher non-infant subsidies is that most installations that provide any subsidy provide only an infant subsidy. Those installations that also provide subsidies to older age groups tend to provide relatively high subsidies for all the age groups that they subsidize. In contrast, installations that provide only an infant subsidy tend to subsidize at a low rate. Consequently, the median infant subsidy, which includes both high- and low-subsidy-rate installations, is lower than the median rate for the older age groups, which do not include any low-subsidy installations.

Another unique aspect of FCC is that, for many providers, delivering child care in their own quarters provides a way to earn money while continuing to be able to care for their own young children.¹⁵ How to think about these children in the context of a study of child-care cost is a matter of some discussion; they are not “paying customers,” but they do occupy FCC slots. Moreover, if their mothers or fathers were not providing FCC, some portion of those children would be seeking and filling CDC or FCC slots.

In discussions with our study sponsor, we agreed that these children would be considered “full patrons” for purposes of coming up with cost estimates. In other words, they are included in the total number

¹⁵If these providers chose to work in a CDC, they would almost certainly not be caring for their own children there. It is generally agreed that caregivers should not care for their own children in CDCs, as they might be inclined to favor them, although exceptions to this rule do occur in some parent cooperatives.

of children served through FCC. From a cost-estimation perspective, this means that the indirect costs of operating the FCC program are spread across a larger number of children, and thus the other costs per child are lower than they would be otherwise. At the same time, we thought it was important to understand their prevalence in our sample. As shown in Table 4.12, the percentage of the providers' own children served in FCC is nontrivial, with the median across Services at 28 percent. As the table shows, these percentages vary only slightly across Services.

APF AND NAF EXPENDITURES

As we have discussed in this report, military child care is an example of employer-sponsored child care. The costs of providing care are shared by both the DoD and parents. A natural question that arises then is, What fraction of the cost is borne by the DoD and what fraction is borne by the parents?

In light of the cost estimates presented in this chapter, it is evident that the answer will depend on a variety of factors including Service and child age. We did not have access to data on parent fees, however, and therefore we cannot answer the cost-sharing question directly. Nevertheless, we can examine two issues that are related to that question.

First, we can examine the average cost per child for DoD CDC care for children of different age groups and compare it to the average annual parent payment. As discussed in Chapter Two, in FY 1998, average DoD weekly parent fees for military child care ranged from \$49 to \$93, depending on the parents' total family income. In each Service, the median parent paid the Category III fee, as shown in Table 2.1 of Chapter Two. Using the DoD average Category III fee, and assuming that parents pay for 50 weeks of care per year, we construct a

Table 4.12

Median Percentage of a Provider's Own Children Served in FCC, by Service

All Services	Army	Navy	Air Force	Marine Corps
28%	29%	31%	28%	22%

“typical” parent fee of \$3,500 per year.¹⁶ If we divide the typical parent fee by our annual cost estimates, we find that the percentage of total cost covered by the parent fees increases as children move into older age groups (see Table 4.13). The largest subsidy is provided to parents of infants and the smallest subsidy is provided to parents of children in school-age care.

Our analyses revealed that total costs for CDC care varied by Service and that the Services have slightly different average fees at the same income level. Not surprisingly then, the percentage of total costs covered by parent fees also varies by Service. For example, the Category III fee covers 36 percent of the cost of infant care in the Marine Corps but only 25 percent of the cost of infant care in the Navy.

Another way to examine the percentage of child-development program costs covered by the DoD versus those covered by parent fees is to compare APF expenditures with NAF expenditures. As discussed in Chapter Three, NAF expenditures are derived from parent fees or from revenue generated through other NAF activities on an installation, such as from activities clubs or golf course fees. APF expenditures are DoD expenditures. Table 4.14 reports NAF expenditures as

Table 4.13
**Percentage of Average Costs Covered by the Category III Parent Fee,
 by Child Age**

Child Age	Average Annual Cost	Parent Fee as a Percent of Cost
Infant (6 weeks–12 months)	\$12,133	29%
Pre-toddler (12–23 months)	\$10,825	32%
Toddler (24–35 months)	\$8,743	40%
Preschool (36 months– 5 years)	\$6,594	53%
School-age (kindergarten and up)	\$4,595	76%

¹⁶The annual fee would be \$2,450 for Category I and \$4,650 for Category V. Some CDCs charge for 52 weeks per year. Using this figure would change estimates only slightly (for example, a less than 1-percent increase paid by parent). The percentages we report in Table 4.13 vary with the income category of the parent. High-income parents receive a lower subsidy than low-income parents do.

Table 4.14**NAF Expenditures as a Percentage of Total Child-Development Program Expenditures**

All Services	Army	Navy	Air Force	Marine Corps
44%	50%	34%	48%	49%

a percentage of total child-development program expenditures for the DoD and for each Service. This analysis reveals that NAF funds cover a lower percentage of CDP expenditures in the Navy than in the other Services.¹⁷

COST OF CONTRACTOR-PROVIDED CARE

As discussed in the Summary of this report, the DoD recently has focused on streamlining and outsourcing support activities, such as child care. To learn more about the costs of this approach, we surveyed DoD installations and agency locations that provide contractor-operated child care to employees. However, there are relatively few examples of contractor-based DoD CDCs. We received responses from five sites.

As part of this research project, the survey asked for enrollment and cost information, as well as information on nonmonetary support provided by the DoD to the contractor. As discussed in Chapter Three, the cost information we collected captures the costs incurred by both the DoD and parents.

It is worth noting that the contractor-based sites differ from the larger sample of DoD-operated CDCs in several respects. First, most are run by DoD agencies and cater mainly to civilian, rather than military, personnel. Second, in one of the centers, parent fees need not adhere to the DoD parent-fee schedule. Third, we were not always able to collect the information that we needed because of the nature of the contract under which a center operates. The best example of this last point is Vance Air Force Base in Oklahoma, which has a contractor-run center on the installation that caters to military personnel. Vance personnel were not able to provide us with

¹⁷This difference is statistically significant at the 5-percent level.

the cost information we required because child care is just a small part of a much larger base-operating support contract, and it was not possible to isolate the costs related to child care.

Characteristics of the contractor-operated centers are presented in Table 4.15. This table makes it clear that there is enormous diversity in the way in which contracts are written and in the menu of services provided to these centers by the government. Further, there are substantial differences across contractors in the percentage of all children cared for within each center.

Interestingly, the lowest percentages of infants are found in two centers with unique arrangements: One requires that parent fees cover child-care costs; the other subsidizes fees in local community-based centers. In the first case, the percentage of infants who receive services may be low because infant-care costs are high; fees that are not subsidized and are paid directly to the contractor must reflect these high costs. In the second case, there simply may not be very many infant slots available in the centers included in the contract, a situation that is common in community-based centers.

Even in our small sample, we found that contractor-based care is provided through several types of arrangements. One location pays the difference between the DoD fee schedule and the fees at accredited child-care centers in the local area. The DoD does not have a “contract” with any single center, and parents can choose which one they like best. One center operates under a GSA arrangement, whereby the government pays the cost of the facilities (and these costs are explicitly considered in the cost estimate) but the parent fees must cover all other costs.¹⁸ At the other centers, the government provides the contractor with the facilities (these costs are not included in the cost estimate) and subsidizes the cost of providing care by supplementing parent fees; these fees conform to the DoD fee schedule.

¹⁸This arrangement differs from the one that governs care in DoD CDCs, where a substantial subsidy means that parent fees cover only direct-care costs.

Table 4.15
Characteristics of Contractor-Operated Centers

Contractor Site Enrollment	Percentage of Infants Served	Contract Arrangement	Parent Fees	Services Provided by Government
305	7%	Government contracts with a private company (also the child-care provider) to build CDCs and the DoD pays mortgage, as well as any maintenance and facility up-grade costs	No government subsidy for provision of child care Parent fees paid directly to the child-care contractor Parent board negotiates fees with contractor Fees vary by child age This center is run according to GSA model	Utilities Security Maintenance
82	10%	Government contracts with the child-care provider Contractor gets a fixed amount per child per week; amount varies by child age Government pays difference between parent fee and contracted amount Government pays for most of equipment	Parent fees based on DoD fee schedule and depend on family income, not age of child	Utilities Telephone Maintenance Custodial

Table 4.15 (continued)

Contractor Site Enrollment	Percentage of Infants Served	Contract Arrangement	Parent Fees	Services Provided by Government
133	16% (infants and pre-toddlers)	<p>Government contracts with the child-care provider</p> <p>Contractor gets a fixed amount per child per week</p> <p>Amount is different for enrollments under and over 200</p> <p>Amount varies by child age</p> <p>Government pays difference between parent fee and contracted amount</p>	Parent fees based on DoD fee schedule and depend on family income, not age of child	<p>Utilities</p> <p>Maintenance</p> <p>Custodial</p> <p>Security</p> <p>Snow removal</p> <p>Background checks</p> <p>Supplies</p>
97	33% (infants and pre-toddlers)	<p>Government contracts with the child-care provider</p> <p>Contractor gets a fixed amount per child per week</p> <p>Government pays difference between parent fee and contracted amount</p>	Parent fees based on DoD fee schedule and depend on family income, not age of child	<p>Utilities</p> <p>Maintenance</p> <p>Security</p> <p>Background checks</p> <p>Supplies</p>
54 (subsidized children at several centers)	4%	<p>We do not know how fee varies by child age</p> <p>Government does not contract with a single provider but subsidizes fees for center-based care at several accredited centers in local area</p> <p>Government pays difference between tuition and parent fees specified by DoD fee schedule</p>	Parent fees based on DoD fee schedule	—

Our cost estimates are based on two cost elements: (1) the costs incurred by the DoD in contracting for child care and (2) parent fees. DoD costs include payments to contractors to supplement parent fees, contract administration costs, other DoD administration, the cost of materials and supplies, and parent fees. In other words, we captured only the resources that flow from the DoD and parents to the contractor, and the costs incurred by the DoD in administering the contract.

In all cases, the contract between the DoD and the contractor had specified fees based on the age of the child served. In most cases, parent fees followed the DoD schedule based on total family income rather than child age. Consequently, the DoD payment to the contractor tended to be higher for younger children whose parents typically are younger and therefore earn less than parents of older children. While our cost estimates do reflect those differential contractor fees, they do not capture any cross-subsidization that might occur within the contractor's organization. In other words, the contractor might experience a loss on each infant but make up for the loss through a profit on each preschool-age child. For this reason, we expect that these cost estimates, while reflective of what the DoD and parents are paying for this care, might underestimate the actual cost the provider incurs in caring for infants and possibly overestimate the actual cost of care for older children.

The survey data reveal that the cost to the DoD and parents of contractor-operated care varies much less by age group than does the cost of DoD-provided care. The difference between the infant costs and preschool-age cost at some locations is essentially zero, and in no case is it greater than \$3,000 per year. This contrasts with the DoD-run centers, where the average cost of infant care is over \$5,000 per year *more* than the average cost of preschool-age care. As a result, we find that the cost of care for infants in a contractor-operated center is generally lower than the cost of infant care at the average CDC, whereas the cost of preschool-age care in a contractor-run center is much higher than the cost of providing such care in DoD centers.¹⁹ This finding of more-uniform costs across child age in

¹⁹One should not conclude from this discussion that the DoD could easily meet the need for care of the youngest children most cost effectively by contracting out infant and pre-toddler care. Due to the higher cost of caring for very young children, these

contractor-operated centers may reflect the possibility that contractors are cross-subsidizing infant care with the higher fees from preschool-age care, something that we know goes on in community-based centers (Cost, Quality, and Child Outcomes Study Team, 1995). However, we do not have the data to determine whether this speculation is correct.

The cost estimates we present incorporate the costs incurred by the DoD in administering the contractor-operated center programs. These costs include contract monitoring and administration, background checks in some cases, enrollment management, utilities, maintenance, supplies, training and curriculum specialists, and other attendant costs. As noted in Table 4.16, the costs covered by the government vary from contract to contract. Moreover, in some cases, even when these costs are “covered” by the government as opposed to being covered by the contractor, they don’t always appear in the Child Development System (CDS) budget. Reported other costs range from \$151 per child to \$2,092 per child.

Because of the small sample, we cannot draw any strong conclusions about the cost of contractor-operated care. As with DoD-run care, there is significant variation across sites regarding the indirect costs that are recorded in the CDS budget. However, we note that the cost of contractor-operated care clearly falls within the range of costs observed for DoD-run care. The estimated cost per infant in the contractor-based centers is generally lower than the average cost per

Table 4.16
Estimated Cost Per Child in Contractor-Operated Centers

	Center 1	Center 2	Center 3	Center 4	Center 5 ^b
Infant	\$9,074	\$6,131	\$10,386	\$9,684	\$7,802–\$9,362
Pre-toddler	\$9,074	\$5,559	\$9,606	\$8,592	\$7,802–\$8,530
Toddler	\$6,162	\$5,559	\$8,566	\$8,332	\$6,450–\$7,282
Preschool	\$6,162	\$4,935	\$8,566	\$7,812	\$6,138–\$6,814
School-age	\$7,098 ^a	—	\$8,306	—	\$4,110–\$4,526

^aLicensed kindergarten.

^bBecause Center 5 consists of multiple accredited centers, a dollar range is shown.

children make up only a small fraction of total enrollment in centers run by private firms. Long waiting lists typically exist for infant and pre-toddler slots.

infant in DoD-run centers, whereas the cost per preschooler in the contractor-based centers is generally higher than the average cost per preschooler in DoD-run centers. There is, therefore, no evidence that contractor-run centers are either cheaper or more expensive than DoD-run centers.²⁰

This final observation is important to a discussion of the outsourcing of DoD child care. The rules governing outsourcing in the federal government, set forth in OMB Circular A-76, allow the government to outsource any service that is currently performed by federal employees *only* if it can be demonstrated that a contractor can provide the same quality of service at a cost that is at least 10-percent lower than the government's cost. Our data do not indicate that contractor-provided care is less costly than DoD-run care. Nor can we comment on the quality of care, since we used accreditation as our sole quality criterion. While accreditation establishes that a center meets NAEYC guidelines, there are nevertheless variations in quality across accredited centers.

²⁰We also emphasize that we did not examine the quality of any of the centers in our study, although we do note that they are all accredited.