



U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation

DAY CARE CENTERS:

1976-1984

Has Supply Kept Up with Demand?

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Office of the Assistant Secretary for Planning and Evaluation

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1976-1984--Has Supply Kept Up With Demand?**

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The views expressed in this technical analysis paper are those of the author and should not be construed as necessarily representing the official position or policy of the Department of Health and Human Services or any office therein.

INTRODUCTION

This paper analyzes the growth of day center capacity in the United States over two points in time, 1976 and 1984, and compares it to the change in potential demand for day care caused by the increased numbers of mothers with young children who were in the labor force. It concludes that day care center supply increased more than the number of young children who have mothers in the labor force.

BACKGROUND

Over the last several decades the labor force participation of women, particularly mothers with young children, has substantially increased. In 1976 the labor force contained 5.4 million mothers with 6.4 million children under the age of six. By 1984 there were 8.0 million women in the labor force who had a total of 9.3 million children under six years of age---a 45 percent increase in the number of children.

As shown in Table 1. surveys of mothers in the labor force indicate that they use a variety of child care arrangements for children under six, as well as for older children. Generally, these arrangements were made in informal situations---other peoples' homes (40%) or the children's own home (30%), more often with relatives than non-relatives---rather than in child care centers (15%). However, the trend since 1965, when the first data on child care arrangements of working women became available, has shown an increasing use of group (center) care. Group care accounted for about six percent the arrangements for children under six years of age in 1965 and about 15 percent in 1982. Mothers working full-time were about twice as likely to use center care as mothers working part-time.

While these data clearly indicate that day/child care is not synonymous with center care, the general public often views it that way. This paper, while not wishing to perpetuate this misconception will analyze only the supply of child care provided by day care centers.

TABLE 1 . Child Care Arrangements of Working Mothers, 1958-1982 (Children under six years old)*				
Arrangement	Percent			
	1982	1977	1965	1958
Group Care	15	13	6	NA
- employed full time	19	14	8	5
- employed part time	8	9	3	NA
In Home	31	32	47	NA
- employed full time	26	27	47	57
- employed part time	39	40	47	NA
Out of Home	40	40	31	NA
- employed full time	44	46	37	27
- employed part time	35	29	17	NA
Sub-Total: In- & Out of Home	71	72	78	NA
- by relative	44	42	46	NA
- by non-relative	37	30	32	NA

SOURCE: U.S. Bureau of Census, Current Population Reports, Series p-23, nos. 117 and 129; 1982, 1983.

* The reports for 1965 and 1958 do not include five year olds. Five year olds in kindergarten could cause some discrepancies in comparisons across years, but probably would not affect the general picture of group care for children whose mothers work full time.

Recently, the Children's Defense Fund (CDF) published ***Child Care: Whose Priority? A State Child Care Fact Book 1985***. The fact book contains data for 1984 obtained by telephone interviews with state officials responsible for licensing child care. Data on the number of centers is reported for 49 states and the District of Columbia. (Alaska is not reported.) The licensed capacity (number of children) for these centers is reported for 34 states and D.C. In 1978, Abt Associates published ***Day Care Centers in the U.S. A National Profile 1976 - 1977***. This report contained the estimated number of day care centers, their capacity, and the estimated accuracy of state licensing lists for all 51 jurisdictions.

The following section compares the state day care center data from these two reports to analyze the apparent growth in the child care **center** industry.

ANALYSIS

CDF reports that in 1984 there were 61,926 centers on state licensing lists. For the 35 jurisdictions with data on center capacity, there were slots for 2.47 million children. No adjustments were made to the reports given by state licensing officials to compensate for the accuracy of such lists.

In 1976, Abt conducted a study to estimate the total U.S. supply of day care centers and the characteristics of these centers. They found that licensing lists contained a number of facilities which **at that point in time** did not meet their definition of day care

center---provides non-live in child care, has a capacity for 13 or more children, has at least one child enrolled for 25 or more hours per week, was operating at the time of the survey, is open at least 9 months of the year, and enrolls a majority of non-handicapped children. When calling a sample of names on licensing lists from each state, they found nationwide that about 62 percent of the facilities listed met their definition. We do not know whether problems like those found in 1976 still exist in 1984. Lists could be better or worse. However, we believe that it is more accurate read prudent to adjust the 1984 figures downward. This analysis uses the Abt adjustment factor for each state. Adjusting the CDP 1984 data, we conservatively estimate 39,293 centers with a total capacity in the same 35 jurisdictions of 1.61 million slots.

TABLE 2 . Number of Licensed Day Care Centers and Their Capacity, 1976-1984		
	1984	1976
Number of licensed centers	61,926	29,368
Accuracy of licensing lists	Unknown	62%
Adjusted number of centers	39,293	18,307
Number of States with data		
- centers	50	51
- center capacity	35	51
Licensed capacity, adjusted, 35 jurisdictions (slots)	1,609,555	773,826
Licensed capacity, estimated, 51 jurisdictions (slots)	2,076,506	1,006,905
Average center capacity (slots)	48	52
SOURCE: Children's Defense Fund, <i>Child Care: Whose Priority? A State Child Care Fact Book 1985</i> , 1985. Abt Associates Inc., <i>Day Care Centers in the U.S. A National Profile 1976-1977</i> , 1978.		

For 1976, Abt reported 18,307 centers with a total capacity of 1.01 million slots (51 jurisdictions) and 0.77 million slots in the same 35 jurisdictions as reported by the Children's Defense Fund. (See Table 2. above and Appendix Tables A.1.-A.4. for state-level data.)

Estimating the capacity of centers in the 16 states that did not report capacity data was accomplished using two methods: (a) the 1984 average capacity (48 children) of day care centers found for the 35 jurisdictions reporting data multiplied by the number of centers; and (b) the average capacity found in 1976 for each of the 16 missing states multiplied times each state's number of centers. These two procedures give estimates of an additional 0.76 to 0.83 million slots; which brings the total estimated slots for 1984 to about 2.1 million slots; compared to 1.0 million in 1976.

The number of centers and their capacity have more than doubled from 1976 to 1984. In several states like Connecticut, Iowa, New Hampshire, South Carolina, and Texas the increase has been even more substantial. (However, the data look like there might be an error in the CDF estimate of number of centers in New Hampshire. See Table A.3.)

There is only one state, Arkansas, where the capacity may have decreased. (However, the number of centers in Arkansas did increase. If capacity actually declined, it was

caused by a decline in the average number of children per center.)

Day care centers predominately serve children under the age of six. The Abt study reported that the centers' age mix included about 85 percent of children under this age. Since 1976, parents have increased their use of center care for school age children. But, parents also have increased their use of center care for infants. So, centers probably retain approximately the same age mix with at least 80 percent of children served under the age of six.

The increase in capacity nationwide can be compared with the increase in the number of children younger than six whose mothers work to estimate the change in the availability of center care for this population. In 1976 centers could serve 15.6 percent of these children (1.02 million slots/6.4 million children), while in 1984 centers could serve 22.6 percent (2.1 million slots/9.3 million children). This calculation of growth in the day care center industry uses very conservative assumptions. It is quite possible that the growth has been even more significant than shown here. On the other hand, since we have not compared the growth in centers with the growth in working mothers by state, we can not say whether the change in supply has been more pronounced in some states over others.¹

CONCLUSION

Whether this increase in supply is sufficient to reasonably satisfy the demand for center care is a hotly contested issue. No doubt the growth has been uneven from community to community. It also must be noted that cost can be a barrier to the accessibility of center care to some parents, particularly, those with lower incomes, and that an increase in slots, therefore, does not guarantee an increase of center care availability for all children. However, generally **it appears that the availability of center care for children under six whose mothers work has improved rather than deteriorated since the mid-seventies.**

¹ In a recent paper---Sandra Rofferth and Deborah Phillips, "Working Mothers and the Care of Their Children: 1970 to 1995," NICHD/NAEYC, 1986 (unpublished manuscript)---the authors multiply the unadjusted number of centers, 61,079 (not including an estimate for Alaska), reported by the Children's Defense Fund, times an average enrollment of 75 children (based on their personal communication with R. Neugebauer) and estimate in 1985 that centers could enroll slightly over 4.5 million children. Their estimate is more than twice the estimate made in this paper and would imply that there was enough center..slots on a nationwide basis to serve over 40% of the children under six years of age whose mothers work.

APPENDIX

TABLE A.1 . 1984					
State	Number of Licensed Child Care	Number of Licensed Child Care Adjusted- 1976 List Accuracy	Total Center Capacity	Total Center Capacity Adjusted 1976 List Accuracy	Average Center Capacity
Alabama	919	693	40,000	30170	44
Alaska (est.)*	75	44	NA	NA	NA
Arizona	741	471	55,000	34939	74
Arkansas	750	431	23,350	13419	31
California	6,959	3392	348,032	169648	50
Colorado	850	414	45,039	21934	53
Connecticut	1,112	983	46,955	41490	42
Delaware	138	112	NA	NA	NA
Dist. of Col.	300	193	14,444	9307	48
Florida	3,849	2642	266,000	182609	69
Georgia	1,875	1407	NA	NA	NA
Hawaii	360	283	19,266	15130	54
Idaho	840	376	NA	NA	NA
Illinois	2,355	1230	112,394	58693	48
Indiana	527	432	36,452	29885	69
Iowa	1,114	729	33,791	22104	30
Kansas	958	354	NA	NA	NA
Kentucky	1,024	653	31,413	20023	31
Louisiana	2,000	1556	NA	NA	NA
Maine	175	99	6,775	3848	39
Maryland	833	664	35,034	27931	42
Massachusetts	1,756	703	63,225	25321	36
Michigan	2,480	1028	NA	NA	NA
Minnesota	1,040	646	36,706	22795	35
Mississippi	1,135	709	54,224	33873	48
Missouri	700	637	38,000	34574	54
Montana	125	90	4,000	2880	32
Nebraska	256	83	NA	NA	NA
Nevada	226	166	NA	NA	NA
New Hampshire	1,000	657	NA	NA	NA
New Jersey	1,750	642	100,000	36658	57
New Mexico	353	175	16,566	8207	47
New York	1,943	1146	NA	NA	NA
North Carolina	2,521	1949	120,584	93241	48
North Dakota	54	35	NA	NA	NA
Ohio	2,168	1402	125,000	80816	58
Oklahoma	1,200	1039	71,500	61931	60
Oregon	480	329	22,500	15405	47
Pennsylvania	1,679	1233	82,764	60767	49

State	Number of Licensed Child Care	Number of Licensed Child Care Adjusted-1976 List Accuracy	Total Center Capacity	Total Center Capacity Adjusted 1976 List Accuracy	Average Center Capacity
Rhode Island	90	87	4,000	3886	44
South Carolina	1,241	812	NA	NA	NA
South Dakota	80	53	3,848	2565	48
Tennessee	1,389	796	86,928	49807	63
Texas	6,996	5283	500,173	377695	71
Utah	160	126	13,000	10203	81
Vermont	321	190	5,452	3225	17
Virginia	741	578	NA	NA	NA
Washington	808	609	NA	NA	NA
West Virginia	150	125	3,429	2864	23
Wisconsin	1,170	768	NA	NA	NA
Wyoming	160	42	6,452	1710	40
TOTAL	61926	39293	2472296	1609555	48
COUNT	51	51	51	35	35

*NOTE: 1984 Number of centers for Alaska estimated using 1976 data.

TABLE A.2 . 1976

State	Number of Centers on State Licensing List	Est. Number of Centers	Estimated Accuracy of Lists	Total Center Capacity	Total Center Enroll.	Average Center Capacity
Alabama	647	489	0.75	29,384	27,255	60
Alaska	49	29	0.59	1,185	1,008	41
Arizona	329	209	0.64	13,378	12,106	64
Arkansas	482	277	0.57	13,628	11,441	49
California	4,064	1,981	0.49	111,547	113,775	56
Colorado	423	206	0.49	11,161	11,306	54
Connecticut	232	205	0.88	7,800	7,365	38
Delaware	101	82	0.81	4,209	3,441	51
Dist. of Col.	239	154	0.64	7,933	6,315	52
Florida	1,563	1,073	0.69	65,774	49,012	61
Georgia	1,322	992	0.75	50,845	38,047	51
Hawaii	191	150	0.79	9,668	8,613	64
Idaho	123	55	0.45	2,627	2,209	48
Illinois	1,576	823	0.52	42,897	41,039	52
Indiana	272	223	0.82	15,027	13,566	67
Iowa	266	174	0.65	6,653	3,542	38
Kansas	168	62	0.37	2,752	2,728	44
Kentucky	433	276	0.64	12,514	9,384	45
Louisiana	590	459	0.78	20,595	16,208	45
Maine	81	46	0.57	2,418	2,076	53
Maryland	439	350	0.80	15,654	13,449	45
Massachusetts	809	324	0.40	14,291	13,753	44
Michigan	864	358	0.41	21,169	20,085	59
Minnesota	314	195	0.62	8,282	8,056	42
Mississippi	818	511	0.62	35,551	31,284	70
Missouri	366	333	0.91	18,317	17,034	55
Montana	50	36	0.72	1,745	1,739	48
Nebraska	329	107	0.33	5,420	4,354	51
Nevada	101	74	0.73	3,936	4,222	53
New Hampshire	99	65	0.66	3,414	2,980	53
New Jersey	1,143	419	0.37	23,482	22,068	56
New Mexico	327	162	0.50	7,277	6,729	45
New York	1,406	829	0.59	49,422	50,766	60
North Carolina	1,495	1,156	0.77	59,231	50,678	51
North Dakota	43	28	0.65	1,238	985	44
Ohio	778	503	0.65	32,227	27,666	64
Oklahoma	538	466	0.87	26,795	22,200	58
Oregon	352	241	0.68	10,762	9,515	45
Pennsylvania	602	442	0.73	18,661	18,788	42
Rhode Island	35	34	0.97	1,947	1,971	57
South Carolina	575	376	0.65	20,045	16,853	53

State	Number of Centers on State Licensing List	Est. Number of Centers	Estimated Accuracy of Lists	Total Center Capacity	Total Center Enroll.	Average Center Capacity
South Dakota	45	30	0.67	1,200	1,003	40
Tennessee	925	530	0.57	26,879	20,163	51
Texas	2,340	1,767	0.76	112,641	100,045	64
Utah	79	62	0.78	3,623	3,405	58
Vermont	71	42	0.59	1,517	1,487	36
Virginia	391	305	0.78	22,643	15,592	74
Washington	369	278	0.75	12,808	14,534	46
West Virginia	85	71	0.84	2,544	2,194	36
Wisconsin	346	227	0.66	10,771	9,197	47
Wyoming	83	22	0.27	1,418	1,278	64
TOTAL	29368	18307	NA	1006905	894509	52
COUNT	51	51	51	51	51	51

TABLE A.3 . 1984 vs 1976

State	1984 Licensed Centers Adjusted-1976 List Accuracy	1976 Licensed Centers Adjusted-1976 List Accuracy	1984 Total Center Capacity Adjusted	1976 Total Center Capacity Adjusted	1984 Average Center Capacity	1976 Average Center Capacity
Alabama	693	488	30170	29384	44	60
Alaska	44	29	0	0	0	0
Arizona	471	209	34939	13378	74	64
Arkansas	431	277	13419	13628	31	49
California	3392	1,981	169648	111547	50	56
Colorado	414	206	21934	11161	53	54
Connecticut	983	205	41490	7800	42	38
Delaware	112	82	0	0	0	0
Dist. of Col.	193	154	9307	7933	48	52
Florida	2642	1,073	182609	65774	69	61
Georgia	1407	992	0	0	0	0
Hawaii	283	150	15130	9668	54	64
Idaho	376	55	0	0	0	0
Illinois	1230	823	58693	42897	48	52
Indiana	432	223	29885	15027	69	67
Iowa	729	174	22104	6653	30	38
Kansas	354	62	0	0	0	0
Kentucky	653	276	20023	12514	31	45
Louisiana	1556	459	0	0	0	0
Maine	99	46	3848	2418	39	53
Maryland	664	350	27931	15654	42	45
Massachusetts	703	324	25321	14291	36	44
Michigan	1028	358	0	0	0	0
Minnesota	646	195	22795	8282	35	42
Mississippi	709	511	33873	35551	48	70
Missouri	637	333	34574	18317	54	55
Montana	90	36	2880	1745	32	48
Nebraska	83	107	0	0	0	0
Nevada	166	74	0	0	0	0
New Hampshire	657	65	0	0	0	0
New Jersey	642	419	36658	23482	57	56
New Mexico	175	162	8207	7277	47	45
New York	1146	829	0	0	0	0
North Carolina	1949	1,156	93241	59231	48	51
North Dakota	35	28	0	0	0	0
Ohio	1402	503	80816	32227	58	64
Oklahoma	1039	466	61931	26795	60	58
Oregon	329	241	15405	10762	47	45
Pennsylvania	1233	442	60767	18661	49	42
Rhode Island	87	34	3886	1947	44	57
South Carolina	812	376	0	0	0	0

State	1984 Licensed Centers Adjusted-1976 List Accuracy	1976 Licensed Centers Adjusted-1976 List Accuracy	1984 Total Center Capacity Adjusted	1976 Total Center Capacity Adjusted	1984 Average Center Capacity	1976 Average Center Capacity
South Dakota	53	30	2565	1200	48	40
Tennessee	796	530	49807	26879	63	51
Texas	5283	1,767	377695	112641	71	64
Utah	126	62	10203	3623	81	58
Vermont	190	42	3225	1517	17	36
Virginia	578	305	0	0	0	0
Washington	609	278	0	0	0	0
West Virginia	125	71	2864	2544	23	36
Wisconsin	768	227	0	0	0	0
Wyoming	42	22	1710	1418	40	64
TOTAL	39293	18307	1609555.	773826		
COUNT	51	51	35	35	35	35
AVERAGE					48.1	52.2

TABLE A.4 . 1984 Adjusted and 1984 vs 1976					
State	1984 Capacity-Missing States Est. Using (A) 1984 Ave.	1984 Capacity-Missing States Est. Using (B) 1976 Ave.	1984 Capacity Adjusted for (A) & Lic. List Accuracy	1984 Capacity Adjusted for (B) & Lic. List Accuracy	1976 Capacity Adjusted for Lic. List Accuracy
Alabama	0	0	30170	30170	29,384
Alaska (est.)	3600	3065	2131	1814	1,185
Arizona	0	0	34939	34939	13,378
Arkansas	0	0	13419	13419	13,628
California	0	0	169648	169648	111,547
Colorado	0	0	21934	21934	11,161
Connecticut	0	0	41490	41490	7,800
Delaware	6624	7083	5378	5751	4,209
Dist. of Col.	0	0	9307	9307	7,933
Florida	0	0	182609	182609	65,774
Georgia	90000	96103	67534	72114	50,845
Hawaii	0	0	15130	15130	9,668
Idaho	40320	40121	18029	17940	2,627
Illinois	0	0	58693	58693	42,897
Indiana	0	0	29885	29885	15,027
Iowa	0	0	22104	22104	6,653
Kansas	45984	42523	16970	15693	2,752
Kentucky	0	0	20023	20023	12,514
Louisiana	96000	89739	74685	69814	20,595
Maine	0	0	3848	3848	2,418
Maryland	0	0	27931	27931	15,654
Massachusetts	0	0	25321	25321	14,291
Michigan	119040	146646	49324	60763	21,169
Minnesota	0	0	22795	22795	8,282
Mississippi	0	0	33873	33873	35,551
Missouri	0	0	34574	34574	18,317
Montana	0	0	2880	2880	1,745
Nebraska	12288	12967	3996	4217	5,420
Nevada	10848	12021	7948	8807	3,936
New Hampshire	48000	52523	31515	34485	3,414
New Jersey	0	0	36658	36658	23,482
New Mexico	0	0	8207	8207	7,277
New York	93264	115835	54990	68298	49,422
North Carolina	0	0	93241	93241	59,231
North Dakota	2592	2388	1688	1555	1,238
Ohio	0	0	80816	80816	32,227
Oklahoma	0	0	61931	61931	26,795
Oregon	0	0	15405	15405	10,762
Pennsylvania	0	0	60767	60767	18,661
Rhode Island	0	0	3886	3886	1,947
South Carolina	59568	66159	38952	43262	20,045

State	1984 Capacity-Missing States Est. Using (A) 1984 Ave.	1984 Capacity-Missing States Est. Using (B) 1976 Ave.	1984 Capacity Adjusted for (A) & Lic. List Accuracy	1984 Capacity Adjusted for (B) & Lic. List Accuracy	1976 Capacity Adjusted for Lic. List Accuracy
South Dakota	0	0	2565	2565	1,200
Tennessee	0	0	49807	49807	26,879
Texas	0	0	377695	377695	112,641
Utah	0	0	10203	10203	3,623
Vermont	0	0	3225	3225	1,517
Virginia	35568	55011	27745	42912	22,643
Washington	38784	37226	29219	28046	12,808
West Virginia	0	0	2864	2864	2,544
Wisconsin	56160	55516	36845	36422	10,771
Wyoming	0	0	1710	1710	1,418
TOTAL	758640	834926	2076505.5	2121447.	1006905
COUNT	16	16	51	51	51