A Working Paper

kids count

Ranking States on Improvement in Child Well-Being Since 2000
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March 2009

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EXECUTIVE SUMMARY

Each year since 1990, the Annie E. Casey Foundation has released a *KIDS COUNT Data Book* assessing child well-being in each state based on ten key statistical indicators. The indicators are used to rank states in terms of overall child well-being. In contrast, this publication uses the KIDS COUNT data from 2000 to 2005 to rank states based on improvements in child well-being in each state during that period.

It is important to understand that improvement in child well-being is quite different than the level of child well-being in a state. When states are simply ranked against each other at a point in time, it is not clear whether child well-being is improving or deteriorating collectively or for any given state because states are always being compared to other states. It is important to recognize that the well-being of children in states may be improving (or deteriorating) even though there is no change in relative rank.

For each year from 2000 to 2005, we created a state composite index of child well-being (based on the ten KIDS COUNT indicators). We label this index the KIDS COUNT Child Well-Being Index, or KCCWBI. The movement of this index over time indicates if general child well-

being is improving or deteriorating.

Key findings include:

- Nationwide child well-being improved by 5 percent between 2000 and 2005, but most of the improvement was experienced between 2000 and 2003, when the KCCWBI rose by four points. Only 21 states showed improvement between 2003 and 2005.

- Between 2000 and 2005, four states (Connecticut, Maryland, Oregon, and Hawaii) showed an improvement of 10 percent or more on the KCCWBI.

- In four states (Maine, South Dakota, North Dakota, and Vermont), child well-being deteriorated by more than 10 percent on the KCCWBI between 2000 and 2005.

- The four states that declined the most in child well-being are relatively small, relatively rural, and have populations made up disproportionately of non-Hispanic whites.

- The modest improvement in child well-being from 2000 to 2005 stands in contrast to large improvements seen in the 1995 to 2000 period when a similar index rose by 12 points. Only 35 of the 50 states showed improvement from 2000 to 2005, compared to the late 1990s when 43 out of 50 states showed improvement in child well-being.

- There is no significant correlation between how well children were doing in a state in 2000 and subsequent changes in well-being between 2000 and 2005.

- About one-third of the states (16) showed very little change (2 percent or less) between 2000 and 2005.

- Looking at the 1990 to 2005 period, the level of child well-being across states is much more stable than the changes over five-year periods.

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Introduction

Since 1990, the KIDS COUNT project of the Annie E. Casey Foundation has tracked the status of children and families in the United States based on the performance of ten statistical indicators. The national *KIDS COUNT Data Book* uses these ten key indicators to build an index of child well-being in each state, and uses that index to rank states in terms of overall child well-being.

In the *KIDS COUNT Data Book*, the focus is on how states compare to one another at one point in time and state rankings are based on the most recently available data. State changes over time are presented graphically for each indicator in each state, but there is no systematic comparison of changes across states. Comparing the rank from one year to the next does not reflect absolute improvement (or deterioration) because the ranks are always relative to other states. For example in the 1990s, Mississippi ranked last or nearly last every year despite the fact that there was a 9 percent improvement in child well-being in Mississippi over the decade.[1] It is important to recognize that the well-being of children in states may be improving even though there is no change in relative rank.

This report uses the ten KIDS COUNT indicators to assess increases and decreases in

absolute child well-being for each state since 2000. It updates a similar study using KIDS COUNT data from the 1990s.[2] Research has shown that the ten indicators used in KIDS COUNT closely parallel changes using a broader set of indicators, both over time,[3] and across states.[4] Consequently, we expect the trends shown by these ten indicators to be a good reflection of real change over time.

Year-to-year changes in the state-level index are usually quite small and may not provide a reliable assessment of real trends. It is difficult to tell whether year-to-year changes reflect true change or simply random fluctuations. Also, since gains made during one short period may be negated by declines in the next short period, a longer perspective provides a more definitive and reliable assessment of trends. Therefore, in this study we generally focus on trends over a five-year period.

In this report, we first focus on the five-year changes from 2000 to 2005, nationally and state-by-state. Subsequently, we compare the changes from 2000 to 2005 with those from the previous two five-year periods (1990 to 1995 and 1995 to 2000).

The Data

The data used in this study come from the annual *KIDS COUNT Data Book* that has been issued by the Annie E. Casey Foundation every year since 1990.[5] The *KIDS COUNT Data Book* uses ten key indicators to consistently measure the educational, social, economic, and health status of children state-by-state. Indicators are reported individually and used collectively to rank states in terms of overall child well-being. The indicators are shown in Table 1 below.

Table 1. Ten Indicators of Child Well-Being Used in Post-2000 KIDS COUNT Data Books

1.	Low-Birthweight Rate
2.	Infant Mortality Rate
3.	Child Mortality Rate, Ages 1-14
4.	Teen Death Rate, Ages 15-19
5.	Teen Birth Rate, Ages 15-19
6.	High School Dropout Rate, Ages 16-19
7.	Teens Not Working or In School, Ages 16-19
8.	Underemployed Parents
9.	Children Living in Poverty
10.	Children in Single-parent Families

For a more detailed description of the ten measures used by KIDS COUNT, see Appendix D.

The ten KIDS COUNT measures possess three important attributes: 1) they reflect several important areas of a child's well-being, including health, economic security, educational attainment, behavioral concerns, and social relationships; 2) the indicators reflect experiences across a range of developmental stages—from birth through early adulthood; and 3) they are consistently measured over time and across space, permitting legitimate comparisons among states.

Moreover, the indicators are all derived from federal government statistical agencies, and represent the best regularly available state-level data on child well-being. While the indicators represent a combination of negative outcomes and risk factors, the fact that all the indicators reflect problems facilitates the interpretation that lower values indicate better child well-being.

Over the past several years, the KIDS COUNT project has developed a set of criteria to select the statistical indicators published in the national *KIDS COUNT Data Book* for the

purposes of measuring change over time and ranking the states. The criteria are designed to meet the twin goals of using only the highest-quality data and communicating results clearly and concisely. The criteria are described below.

1. The statistical indicator must be from a reliable source. All of the indicator data used in the *KIDS COUNT Data Book* comes from U.S. government agencies. Most of the data have already been published or released to the public in some other form before we use them. We work with a small circle of data experts to examine and re-examine the quality of the data used in the *KIDS COUNT Data Book* each year.

2. The statistical indicator must be available and consistent over time. Changes in methodologies, practices, or policies may affect year-to-year comparability. Program and administrative data are particularly vulnerable to changes in policies and/or program administration, resulting in data that are not comparable across states or over time.

3. The statistical indicator must be available and consistent for all states. In practice, this means data collected by the federal government or some other national organization. Much of the data collected by states may be accurate and reliable and may be useful for assessing changes over time in a single state, but unless all of the states follow the same data collection and reporting procedures, the data are likely to be inconsistent across states. Without data for every state, we would not be able to construct an overall composite index of child well-being.

4. The statistical indicator should reflect a salient outcome or measure of well-being. We focus on outcome measures rather than programmatic or service data (such as dollars spent on education or welfare costs), which are not always related to the actual well-being of children.

This focus reflects our ultimate aim of improving child well-being, regardless of the policies or programs used to achieve this goal.

5. The statistical indicator must be easily understandable to the public. We are trying to reach an educated lay public, not academic scholars or researchers. Measures that are too complex or esoteric cannot be communicated effectively.

6. The statistical indicators we use must have a relatively unambiguous interpretation. If the value of an indicator changes over time, we want to be sure there is widespread agreement that this is a good thing (or a bad thing) for kids.

7. There should be a high probability that the measure will continue to be produced in the near future. We want to establish a series of indicators that can be produced year after year to track trends in the well-being of children in each state. Therefore, we are reluctant to use data from a one-time survey, even though the survey may provide good information about kids.

Methodology

Using these ten KIDS COUNT indicators, we constructed an index of overall child well-being for each state that we label the KIDS COUNT Child Well-Being Index, or KCCWBI. Similar to the Dow Jones Average or the Gross Domestic Product, the index provides an overall assessment of a complex, multi-dimensional phenomenon in a single number. This approach is also similar to the Fordham Index of Social Health, which combines 16 social indicators, representing the well-being of Americans at different stages of life, to assess the overall quality

of life in the United States.[6]   The American Human Development Report is another example of building an index to reflect a multi-dimensional phenomenon.[7]

To construct the index, we applied a methodology similar to one developed by Kenneth C. Land and Associates:[8]

KIDS COUNT Child Well-Being Index (KCCWBI) in Year $t = (1/N)\{ \Sigma_i [((R_t - R_r)/R_r) \times (-100)]\}$.

- N denotes the number of indicators on which the composite index is based (N equals 10)

- R_t designates the child well-being indicator rate in the year t > base year r.

- R_r designates the indicator rate in the reference or base year r.

- t is years 2001 to 2005.

- Base year r is 2000.

Since the indicators all connote problems, a lower indicator value signifies a better child outcome for a state. However, this property will be inverted when we construct the index so that higher values indicate better outcomes to make interpretation more intuitive.

For each year t, we calculated the indicator's index value, which reflects the percentage change in the indicator from the base year r to the year t. To do this, we subtracted the indicator's value in the base year r from the value in the year t and divided this difference by the base year value. We multiplied each year's change ratio by minus 100 to invert the values and obtain the percent change in the rate from the base year value.

For each year, the index values for the ten indicators are averaged to construct an annual overall index of child well-being for each state. Each indicator is weighted equally in the

composite index calculation. Research shows equal weights are best when true weights are unknown.[9] The index values are rounded to the nearest whole number because we do not feel the state-level measures are strong enough to merit distinctions to a tenth of a percent or less. National index values for each of the ten indicators for each year from 2000 to 2005 are shown in Appendix A.

Results

Between 2000 and 2005, the national KIDS COUNT child well-being index showed a 5 percent improvement in the country as a whole, but this masks significant variation across states and among indicators. Most of the progress came between 2000 and 2003 when the index increased by 4 points. Between 2003 and 2005, the index only went up by a point and the index actually went down slightly between 2003 and 2004.

The improvement or deterioration between 2000 and 2005 for each of the ten indicators is shown in Table 2. Figure 1 shows year-to-year values graphically and indicates that generally the trends over the five-year period were relatively linear. In other words, the year-to-year changes for most indicators either went up consistently or went down consistently.

Table 2. Change in Each of the Ten KIDS COUNT Indicators 2000 to 2005

	Percent Change 2000 to 2005
Low-Birthweight Rate	-8%
Infant Mortality Rate	0
Child Mortality Rate, Ages 1-14	9%
Teen Death Rate, Ages 15-19	3%
Teen Birth Rate, Ages 15-19	17%
High School Dropout Rate, Ages 16-19	36%
Teens Not Working or In School, Ages 16-19	11%
Underemployed Parents	-6%
Child Poverty Rate	-12%
Children in Single-parent Families	-3%

Directionality was reversed so a negative number means deterioration.

Figure 1

CWI Trends by Indicator: U.S.
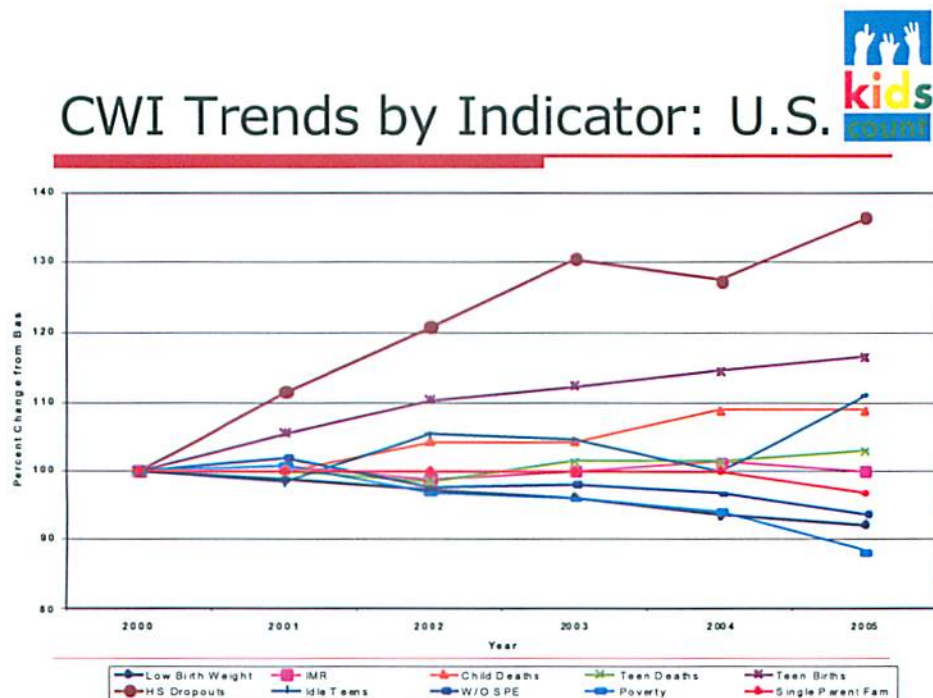
Table 2 shows that overall improvement from 2000 to 2005 was due largely to big improvements in the high school dropout rate and the teen birth rate, which counter-balanced small declines in four indicators (Low-Birthweight, Underemployed Parents, Child Poverty Rate, and Children in Single-parent Families). There was no change in the Infant Mortality Rate between 2000 and 2005.

The overall change in the composite index value between 2000 and 2005 for each state is shown in Table 3, where states are ranked based on the improvement shown in the KCCWBI between 2000 and 2005, with rank 1 reflecting the most improvement.

Table 3. States Ranked in Terms of Improvement in Child Well-Being 2000 to 2005

Rank		Change 2000 to 2005
1	Connecticut	12
1	Maryland	12
3	Oregon	11
4	Hawaii	10
5	Arizona	9
6	North Carolina	8
6	Massachusetts	8
8	New York	7
8	Nevada	7
8	Illinois	7
8	Georgia	7
8	Arkansas	7
13	Alaska	6
14	Virginia	5
14	Delaware	5
16	Washington	4
16	Texas	4
16	Tennessee	4
16	New Jersey	4
16	Idaho	4
16	Florida	4
16	California	4
16	Alabama	4
24	Wyoming	3
24	Utah	3
24	Missouri	3
24	Michigan	3
28	New Hampshire	2
28	Indiana	2
30	South Carolina	1

Rank		Change 2000 to 2005
30	Louisiana	1
30	Iowa	1
33	Nebraska	0
33	Mississippi	0
33	Kentucky	0
36	West Virginia	-1
36	Ohio	-1
36	Minnesota	-1
36	Kansas	-1
40	Rhode Island	-2
40	Oklahoma	-2
40	New Mexico	-2
40	Colorado	-2
44	Wisconsin	-4
44	Pennsylvania	-4
44	Montana	-4
47	Vermont	-13
47	North Dakota	-13
49	South Dakota	-16
50	Maine	-21

The majority of states (32 out of 50) showed improvement in child well-being between 2000 and 2005. However, about one-third of states (16 out of 50) showed very little change between 2000 and 2005: a change of 2 percentage points or less. The slowing of progress on child well-being over the five-year period can been seen by noting that only 21 states showed improvement between 2003 and 2005 (see Table 4).

Connecticut and Maryland exhibited the biggest improvement (up 12 percent), followed closely by Oregon (at 11 percent) and Hawaii (at 10 percent). In three of these four states (Maryland was the exception), only six of the ten indicators showed improvement (some had one or more indicators with no change). The big improvement for these states is a result of the magnitude of the improvement for those indicators moving in a positive direction. For each of these four states, the high school dropout rate improved by more than 36 percent and the teen birth rate by more than 22 percent. In Maryland, the overall improvement was due largely to the fact that the state improved on all of the indicators except low-birthweight (there was no change in children without secure parental employment).

Four states (Maine, South Dakota, North Dakota, and Vermont) showed the most deterioration, with each of them declining by more than 13 percent. Three of the four states declined on seven of the ten indicators with some states showing no change on some measures. North Dakota declined on only five of the ten indicators with two showing no change. In all four of these states, many of the declines were very large, which may be

due in part to rates based on small numbers of events or small sample size. It is also

noteworthy that South Dakota, Maine, and Vermont showed particularly dramatic deterioration

in child well-being between 2003 and 2005 (see Table 4).

Table 4. State Changes in KIDS COUNT Child Well-Being Index: 2003 to 2005

Rank on change 2003 to 2005		2003	2005	Change 2003 to 2005	Rank on change 2003 to 2005		2003	2005	Change 2003 to 2005
1	Hawaii	-9	10	19	22	Virginia	5	5	0
2	Alaska	-6	6	12	22	Minnesota	-1	-1	0
3	Massachusetts	0	8	7	28	Kansas	0	-1	-1
4	Montana	-10	-4	6	28	Pennsylvania	-3	-4	-1
5	Nebraska	-4	0	4	28	Georgia	8	7	-1
5	Arizona	5	9	4	28	New Hampshire	3	2	-1
5	New York	4	7	4	28	Florida	5	4	-1
8	Maryland	8	12	3	33	West Virginia	1	-1	-2
8	Louisiana	-2	1	3	33	Mississippi	2	0	-2
8	Connecticut	9	12	3	33	Tennessee	6	4	-2
8	North Dakota	-16	-13	3	33	New Mexico	0	-2	-2
8	Oregon	8	11	3	37	Ohio	2	-1	-3
8	Iowa	-2	1	3	37	Wyoming	5	3	-3
8	Illinois	4	7	3	37	Arkansas	10	7	-3
15	North Carolina	5	8	2	40	Oklahoma	3	-2	-4
15	Colorado	-4	-2	2	41	Michigan	8	3	-5
15	Idaho	2	4	2	41	Missouri	8	3	-5
15	Utah	1	3	2	41	New Jersey	9	4	-5
15	Washington	2	4	2	41	Delaware	10	5	-5
20	Texas	3	4	1	41	Indiana	7	2	-5
20	California	3	4	1	46	South Carolina	7	1	-7
22	Rhode Island	-2	-2	0	47	Wisconsin	4	-4	-8
22	Kentucky	0	0	0	48	South Dakota	-6	-16	-10
22	Nevada	7	7	0	49	Maine	-5	-21	-16
22	Alabama	4	4	0	50	Vermont	7	-13	-20

The four states that performed the worst are located in the upper-Midwest and New England, and the populations in these states are disproportionately non-Hispanic white. All of these states ranked relatively high in child well-being when compared with other states in 2000. It is also worth noting that the four states that declined the most in child well-being are all relatively rural, which underscores the economic problems faced by many rural communities since 2000.[10]

One might suspect that states with relatively high levels of child well-being in 2000 would not be as likely to improve from 2000 to 2005 as those with lower levels of well-being. Or conversely, those near the bottom of the ranking would find it easier to improve. This kind of change is often referred to as "regression toward the mean" and refers to the phenomenon that scores above the mean tend to come down and scores below the mean tend to rise over time.

However, analysis shows that there is little correlation between child well-being in 2000 and change between 2000 and 2005 (see Table 5). Across the states there is a moderate negative correlation (r = -.19) between ranking on well-being in 2000 and ranking on improvement between 2000 and 2005. While four out of the five states with the lowest rank in 2000 improved between 2000 and 2005, four out of the five states with the highest rank in 2000 also improved.

Table 5. Child Well-Being in 2000 and Improvement from 2000 to 2005

State	Rank on Child Well-Being in 2000 (1 = best)	Percent Change 2000 to 2005	State	Rank on Child Well-Being in 2000 (1 = best)	Percent Change 2000 to 2005
Minnesota	1	-1	Colorado	26	-2
New Hampshire	2	2	New York	27	7
Utah	3	3	Ohio	28	-1
New Jersey	4	4	Michigan	29	3
Iowa	5	1	Illinois	30	7
Connecticut	6	12	Missouri	31	3
North Dakota	7	-13	Nevada	32	7
Vermont	8	-13	Montana	33	-4
Massachusetts	9	8	Florida	34	4
Wisconsin	10	-4	Oklahoma	35	-2
Nebraska	11	0	Delaware	36	5
Maine	12	-21	Texas	37	4
Pennsylvania	13	-4	Kentucky	38	0
Virginia	14	5	North Carolina	39	8
South Dakota	15	-16	Alaska	40	6
Maryland	16	12	Georgia	41	7
Washington	17	4	South Carolina	42	1
Rhode Island	18	-2	Tennessee	43	4
Kansas	19	-1	West Virginia	44	-1
Indiana	20	2	Arizona	45	9
California	21	4	New Mexico	46	-2
Hawaii	22	10	Arkansas	47	7
Idaho	23	4	Alabama	48	4
Wyoming	24	3	Louisiana	49	1
Oregon	25	11	Mississippi	50	0

The overall index value for each state for each year from 2000 to 2005 is shown in Appendix B.

Child Well-Being Trends Since 1990

To follow the trends of the 1990s into the current century, we use a previously published study to compare the changes during the 2000 to 2005 period to those in 1990 to 1995 and 1995 to 2000 periods. Assessment of the trends in the 1990s is based on data used in the *KIDS COUNT Data Books* published prior to 2000. Although the indicators used in the pre-2000 *Data Books* differ slightly from those used in this report, we believe they are similar enough to the indicators used in the post-2000 *Data Books* to make trends comparable. The state trends for the 1990s are shown in Appendix C.

State changes in child well-being for the first half of the 1990s (1990 to 1995) and the second half of the decade (1995 to 2000) are examined separately because the social and economic conditions and child well-being trends were quite different in these two periods. O'Hare and Bramstedt[11] as well as Land and Associates[12] show that child well-being improved much more in the second half of the 1990s than in the first half.

The top ten states and the bottom ten states based on improvement in each of the three five-year periods (1990-1995, 1995-2000, and 2000-2005) are shown in Table 6. No state was in the top ten for all three periods, and only one state (North Dakota) was in the bottom ten states for all three periods.

The lack of consistency in improvement or deterioration reflected in Table 6 stands in stark contrast to annual KIDS COUNT state rankings (which are based on one point in time) where many of the states remain in the top tier (or the bottom tier) year after year (see Table 7). Of the ten states that were ranked in the top ten in 1995 in terms of overall

child well-being, seven were ranked in the top ten in 2000 and 2005. Of the ten states that were ranked in the bottom ten states in 1995 in terms of overall child well-being, six were also in the bottom ten in 2000 and 2005.

Table 6. Top Ten and Bottom Ten States in Terms of Improvement 1990-1995, 1995-2000, 2000-2005

Top Ten States 2000-2005	Top Ten States 1995-2000	Top Ten States 1990-1995
Connecticut	California	Massachusetts
Maryland	Maryland	Alaska
Oregon	Minnesota	Hawaii
Hawaii	New York	Michigan
Arizona	Connecticut	Colorado
North Carolina	Florida	Indiana
Massachusetts	Illinois	Maine
Arkansas	Pennsylvania	Nevada
New York	New Jersey	New Jersey
Georgia	Georgia	Utah

Bottom Ten States 2000-2005	Bottom Ten States 1995-2000	Bottom Ten States 1990-1995
Colorado	North Dakota	New York
Oklahoma	Colorado	North Carolina
Rhode Island	South Dakota	Ohio
New Mexico	Kansas	Pennsylvania
Wisconsin	Maine	Rhode Island
Pennsylvania	Nebraska	West Virginia
Montana	Alaska	Iowa
Vermont	Delaware	North Dakota
North Dakota	Wisconsin	South Carolina
South Dakota	Hawaii	Arizona
Maine	Montana	New Mexico (tied
		Oregon (tied)

Table 7. Top Ten States and Bottom Ten States in Child Well-Being: 1995, 2000, and 2005

Top Ten

2005	2000	1995
Connecticut	Iowa	New Hampshire
Iowa	Maine	Iowa
Massachusetts	Massachusetts	North Dakota
Minnesota	Minnesota	Maine
Nebraska	Nebraska	Nebraska
New Hampshire	New Hampshire	Utah
New jersey	New Jersey	Vermont
North Dakota	North Dakota	Minnesota
Utah	Utah	Wisconsin
Vermont	Vermont	Connecticut

Bottom Ten

Alabama	Alabama	Louisiana
Arkansas	Arizona	Mississippi
Georgia	Arkansas	Tennessee
Kentucky	Georgia	Florida
Louisiana	Louisiana	South Carolina
Mississippi	Mississippi	Arizona
New Mexico	New Mexico	Alabama
Oklahoma	Oklahoma	Georgia
South Carolina	South Carolina	North Carolina
Tennessee	Tennessee	West Virginia

We believe this underlies a fundamental aspect of measuring child well-being among states. Namely, differences across states at one point in time are much larger than differences in changes over time across states. In other words, the difference between the best and worst states in terms of child well-being at one point in time are much larger than the differences between the states that improve the most and those that deteriorate the most over a given period.

Conclusion

We used the ten indicators regularly reported in the *KIDS COUNT Data Book* to create a composite index of child well-being for each of the 50 states reflecting change from 2000 to 2005. The majority of the states showed improvement in child well-being between 2000 and 2005, but there was extensive variation among the states. Four states improved by more than 10 percent, but four states showed a decline of at least 10 percent in child well-being.

Most of the state-level improvements occurred between 2000 and 2003. Nationally, the KCCWBI improved by four points from 2000 to 2003, but only one point between 2003 and 2005. In addition, only 21 states showed improvement between 2003 and 2005. We found no strong regional patterns for the states that improved the most. But the four states that performed the worst are all disproportionately rural and located in the upper-Midwest and New England. Also they all have disproportionately non-Hispanic white populations.

Looking at longer-term trends there was little consistency among the states that performed the best or the worst in terms of improvement. We believe this is related to the relatively small differences across the states in terms of changes over time.

APPENDIX A. Percent Change Since 2000 for Each of the Ten Indicators in KCCWBI: 2001 to 2005

Year	Percent Low Birth-weight	Infant Mortality Rate	Child Death Rate	Teen Death Rate	Teen Birth Rate	High School Dropout Rate	Percent Idle Teens	Percent With Under-employed Parents	Child Poverty Rate	Percent in Single-Parent Families	Total
2001	-1	1	0	0	6	12	-2	2	1	0	2
2002	-3	-1	5	-1	11	21	5	-2	-3	0	3
2003	-4	0	5	1	13	30	5	-2	-4	0	4
2004	-7	1	9	1	15	27	0	-3	-6	0	4
2005	-8	0	9	3	17	36	11	-6	-12	-3	5

APPENDIX B. TABLE B. PERCENT CHANGE FROM 2000 IN KIDS COUNT CHILD WELL-BEING INDEX VALUES FOR EACH STATE FOR EACH YEAR FROM 2001 TO 2005

	2001	2002	2003	2004	2005
United States	2	3	4	4	5
Alabama	-1	-5	4	7	4
Alaska	0	14	-6	5	6
Arizona	2	7	5	9	9
Arkansas	9	7	10	4	7
California	-1	4	3	6	4
Colorado	-9	-5	-4	-6	-2
Connecticut	7	8	9	12	12
Delaware	-1	3	10	2	5
DC	-10	-4	1	-13	-1
Florida	3	6	5	6	4
Georgia	5	6	8	5	7
Hawaii	-9	-9	-9	2	10
Idaho	-5	2	2	1	4
Illinois	-1	5	4	6	7
Indiana	4	1	7	-1	2
Iowa	8	3	-2	12	1
Kansas	0	-3	0	4	-1
Kentucky	5	-1	0	-3	0
Louisiana	0	-4	-2	-3	1
Maine	-11	-22	-5	-15	-21
Maryland	5	8	8	8	12
Massachusetts	7	5	0	-4	8
Michigan	3	6	8	4	3
Minnesota	0	-8	-1	-6	-1
Mississippi	0	1	2	3	0

	2001	2002	2003	2004	2005
Missouri	1	2	8	4	3
Montana	-6	-9	-10	-12	-4
Nebraska	-10	-6	-4	-4	0
Nevada	11	5	7	2	7
New Hampshire	5	5	3	-3	2
New Jersey	6	5	9	4	4
New Mexico	6	-3	0	-2	-2
New York	-2	3	4	2	7
North Carolina	2	6	5	5	8
North Dakota	-18	2	-16	-3	-13
Ohio	2	3	2	1	-1
Oklahoma	-2	4	3	3	-2
Oregon	8	11	8	12	11
Pennsylvania	-4	-9	-3	1	-4
Rhode Island	-1	3	-2	-4	-2
South Carolina	4	1	7	0	1
South Dakota	-1	-9	-6	-5	-16
Tennessee	5	4	6	1	4
Texas	4	2	3	4	4
Utah	1	-6	1	5	3
Vermont	-8	1	7	11	-13
Virginia	3	0	5	2	5
Washington	1	-1	2	0	4
West Virginia	6	0	1	4	-1
Wisconsin	-9	-5	4	-2	-4
Wyoming	1	0	5	3	3

APPENDIX C. Table C. Five-Year Changes in Child Well-Being 1990-1995, 1995-2000, and 2000-2005

State	Percent Change in KCCWBI 1990-1995	Percent Change in KCCWBI 1995-2000	Percent Change in KCCWBI 2000-2005	State	Percent Change in KCCWBI 1990-1995	Percent Change in KCCWBI 1995-2000	Percent Change in KCCWBI 2000-2005
Alabama	4	9	4	Nevada	7	9	7
Alaska	8	-2	6	New Hampshire	6	7	2
Arizona	-4	10	9	New Jersey	7	14	4
Arkansas	1	6	7	New Mexico	-6	11	-2
California	5	18	4	New York	-1	17	7
Colorado	7	3	-2	No. Carolina	-1	11	8
Connecticut	0	15	12	North Dakota	-3	3	-13
Delaware	6	-2	5	Ohio	-1	11	-1
Florida	3	15	4	Oklahoma	4	9	-2
Georgia	3	13	7	Oregon	-6	10	11
Hawaii	8	-3	10	Pennsylvania	-1	15	-4
Idaho	6	4	4	Rhode Island	-1	7	-2
Illinois	2	15	7	So. Carolina	-3	11	1
Indiana	7	9	2	South Dakota	6	3	-16
Iowa	-2	8	1	Tennessee	1	10	4
Kansas	0	0	-1	Texas	1	11	4
Kentucky	1	11	0	Utah	7	7	3
Louisiana	2	10	1	Vermont	4	4	-13
Maine	7	0	-21	Virginia	3	11	5
Maryland	4	17	12	Washington	5	10	4
Massachusetts	9	7	8	West Virginia	-1	7	-1
Michigan	8	11	3	Wisconsin	0	-2	-4
Minnesota	2	17	-1	Wyoming	1	8	3
Mississippi	2	6	0	United States	2	12	5
Missouri	3	10	3	No. of States Improving During the Period	38	44	35
Montana	5	-3	-4	National Change	3	12	5
Nebraska	0	-1	0				

APPENDIX D. Definitions and Data Sources for Ten Key KIDS COUNT Indicators

1) **Percent Low–Birthweight Babies:** is the percentage of live births weighing less than 2,500 grams (5.5 pounds). The data are reported by place of mother's residence, not place of birth. Each year there are a small number of births in which the weight of the newborn is not recorded, and births of unknown weight are not included in these calculations.

   SOURCES:
   - Centers for Disease Control and Prevention, National Center for Health Statistics.
   2005 data: Centers for Disease Control and Prevention, National Center for Health Statistics, VitalStats. http://www.cdc.gov/nchs/vitalstats.htm. [March 15, 2008].
   2004 data: "Births: Final Data for 2004," National Vital Statistics Reports, Vol. 55, No. 1 (September 8, 2004), Table 35.
   2003 data: "Births: Final Data for 2003," National Vital Statistics Reports, Vol. 54, No. 2 (September 8, 2004), Table 46.
   2002 data: "Births: Final Data for 2002," National Vital Statistics Reports, Vol. 52, No. 10 (December 17, 2003), Table 46.
   2001 data: "Births: Final Data for 2001," National Vital Statistics Reports, Vol. 51, No. 2, (December 18, 2002), Table 46.
   2000 data: "Births: Final Data for 2000," National Vital Statistics Reports, Vol. 50, No. 5, (February 12, 2002), Table 46.

2) **Infant Mortality Rate (deaths per 1,000 live births)** is the number of deaths occurring to infants under 1 year of age per 1,000 live births. The data are reported by place of residence, not place of death.

   SOURCES:
   - Centers for Disease Control and Prevention, National Center for Health Statistics.
   2005 data: "Deaths: Final Data for 2005," National Vital Statistics Reports, Vol. 56, No. 10 (April 24, 2008), Table 32 and Centers for Disease Control and Prevention, National Center for Health Statistics VitalStats. http://www.cdc.gov/nchs/vitalstats.htm. [March 15, 2008].

2004 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2004 CD-Rom and "Births: Final Data for 2004," National Vital Statistics Reports, Vol. 55, No. 1 (September 29, 2006), Table 11.

2003 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2003 CD-Rom and "Births: Final Data for 2003," National Vital Statistics Reports, Vol. 54, No. 2 (September 8, 2004), Table 10.

2002 data: "Deaths: Final Data for 2002," National Vital Statistics Reports, Vol. 53, No. 5 (October 12, 2004), Table 32.

2001 data: "Deaths: Final Data for 2001," National Vital Statistics Reports, Vol. 52, No. 3 (September 18, 2003), Table 33.

2000 data: "Deaths: Final Data for 2000," National Vital Statistics Reports, Vol. 50, No. 15 (September 16, 2002), Table 36.

3) **Child Death Rate (deaths per 100,000 children ages 1–14):** is the number of deaths to children between ages 1 and 14, from all causes, per 100,000 children in this age range. The data are reported by place of residence, not place of death.

SOURCES:

- **Death Statistics:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).

  2005 data: Special tabulations provided by CDC, NCHS, Division of Vital Statistics, "Deaths by 10-Year Age Groups: United States and Each State," for 2005.

  2004 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2004 CD-Rom.

  2003 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2003 CD-Rom.

  2001 and 2002 data: Special tabulations provided by CDC, NCHS, Division of Vital Statistics, "Deaths by 10-Year Age Groups: United States and Each State," for the years 2001 and 2002.

  2000 data: CDC, NCHS, Division of Vital Statistics, "Deaths by 10-Year Age Groups: United States and Each State, 2000," accessed online at www.cdc.gov/nchs/data/dvs/VS00100.TABLE23B_2000.pdf (January 10, 2003).

- **Population Statistics:** Population Reference Bureau, analysis of data from the U.S. Census Bureau.

  2005 data: State Characteristics Population Estimates File, accessed online at http://www.census.gov/popest/states/asrh/files/SC_EST2005_6race.csv.

  2004 data: State Characteristics Population Estimates File, accessed online at http://www.census.gov/popest/states/asrh/files/sc_est2004_6race.csv

  2003 data: State Characteristics Population Estimates File, accessed online at

www.census.gov/popest/states/asrh/files/SC-EST2003-race6.csv (May 13, 2005).

2001 and 2002 data: State Characteristics Population Estimates File, accessed online at eire.census.gov/popest/data/states/files/STCH-6R.txt (November 21, 2003).

2000 data: Census 2000 Summary File 1 (SF 1) 100-Percent Data, Table P14.

4) **Teen Death Rate (deaths per 100,000 teens ages 15–19)** is the number of deaths from all causes to teens between ages 15 and 19, per 100,000 teens in this age group. The data are reported by place of residence, not the place where the death occurred.

SOURCES:

- **Death Statistics:** Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).

  2005 data: Special tabulations provided by CDC, NCHS, Division of Vital Statistics, "Deaths by 10-Year Age Groups: United States and Each State," for the 2005.

  2004 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2004 CD-Rom.

  2003 data: Population Reference Bureau, analysis of data from the Multiple Causes of Death Public Use Files for 2003 CD-Rom.

  2002 data: Special tabulations from CDC, NCHS, Division of Vital Statistics, "Worktable III. Deaths from 358 Selected Causes, by 5-Year Age Groups, Race, and Sex: United States, 2002."

  2001 data: CDC, NCHS, Division of Vital Statistics, Work Table III. Deaths from 358 Selected Causes, by 5-Year Age Groups, Race, and Sex: U.S. and Each State, 2001," accessed online at www.cdc.gov/nchs/data/statab/mortfinal2001_workIIIpt1v.pdf (January 6, 2005).

  2000 data: CDC, NCHS, Division of Vital Statistics, Work Table III. Deaths from 358 Selected Causes, by 5-Year Age Groups, Race, and Sex: U.S. and Each State, 2000," accessed online at www.cdc.gov/nchs/data/statab/mortfinal2000_workIII_PT1.pdf (January 6, 2005).

- **Population Statistics:** Population Reference Bureau, analysis of data from the U.S. Census Bureau.

  2005 data: State Characteristics Population Estimates File, accessed online at http://www.census.gov/popest/states/asrh/files/SC_EST2005_6race.csv.

  2004 data: State Characteristics Population Estimates File, accessed online at http://www.census.gov/popest/states/asrh/files/sc_est2004_6race.csv

  2003 data: State Characteristics Population Estimates File, accessed online at

www.census.gov/popest/states/asrh/files/SC-EST2003-race6.csv (May 13, 2005).
2001 and 2002 data: State Characteristics Population Estimates File, accessed online at eire.census.gov/popest/data/states/files/STCH-6R.txt (November 21, 2003).
2000 data: Census 2000 Summary File 1 (SF 1) 100-Percent Data, Table P14.

5) **Teen Birth Rate (births per 1,000 females ages 15–19)** is the number of births to teenagers between ages 15 and 19 per 1,000 females in this age group. Data reflect the mother's place of residence, rather than place of birth. This measure of teenage childbearing focuses on the fertility of all females, ages 15 to 19, regardless of marital status. We focus on births to 15- to 19-year-olds rather than the narrower age range of 15- to 17-year-olds used in some previous *KIDS COUNT Data Books* because recent research strongly suggests that births to young women ages 18 and 19 are as problematic as are births to girls ages 15 to 17. For example, the poverty rate for children born to 18- and 19-year-olds is virtually the same as the poverty rate for children born to females under age 18. We omitted births to girls under age 15, since less than 5 percent of teen births occurred to girls in that age group. The inclusion of girls under age 15 in the denominator would dramatically lower the rate, providing an unrealistic assessment of the true risk being faced by 15- to 19-year-old females.

SOURCES:
- **Birth Statistics:** U.S. Centers for Disease Control and Prevention, National Center for Health Statistics.
  2005 data: Population Reference Bureau, analysis of data from the Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats. http://www.cdc.gov/nchs/vitalstats.htm. [March 15, 2008].
  2004 data: Population Reference Bureau, analysis of data from the Natality Data Set CD Series 21, number 16H (ASCII version).
  2003 data: Population Reference Bureau, analysis of data from the Natality Data Set CD Series 21, number 16H (ASCII version).
  2002 data: Child Trends, Inc., Facts at a Glance (Washington, DC: 2005): Table 1.
  2001 data: Child Trends, Inc., Facts at a Glance (Washington, DC: 2003): Table 1.
  2000 data: Child Trends, Inc., Facts at a Glance (Washington, DC: 2002): Table 1.
- **Population Statistics:** Population Reference Bureau, analysis of data from the U.S. Census Bureau.
  2005 data: State Characteristics Population Estimates File, accessed online at http://www.census.gov/popest/archives/2000s/vintage_2005/

2004 data: State Characteristics Population Estimates File, accessed online at
http://www.census.gov/popest/states/asrh/files/sc_est2004_6race.csv
2003 data: State Characteristics Population Estimates File, accessed online at
www.census.gov/popest/states/asrh/files/SC-EST2003-race6.csv (May 13, 2005).
2001 and 2002 data: State Characteristics Population Estimates File, accessed online at
eire.census.gov/popest/data/states/files/STCH-6R.txt (November 21, 2003).
2000 data: Census 2000 Summary File 1 (SF 1) 100-Percent Data, Table P14.

6) **Percent of Teens Who Are High School Dropouts (ages 16–19)** is the percentage of teenagers between ages 16 and 19 who are not enrolled in school and are not high school graduates. Consistent with Census Bureau policy, persons who have a General Equivalency Diploma or equivalent are included as high school graduates in this measure. The measure used here is defined as a "status dropout" rate by the National Center for Education Statistics (NCES) as shown in its publication, *Dropout Rates in the United States: 2001* (p. 4). We use data on status dropouts in the *KIDS COUNT Data Book* because it is available and comparable for all states. NCES collects data on event dropouts, but only 45 states currently submit event dropout data to the NCES that meets quality and comparability levels needed to justify publishing estimates (see *NCES, Public High School Dropouts and Completers From the Common Core of Data: School Year 2000-02*, p. 2).

For the measure presented here, we focus on teens ages 16 to 19 rather than young adults ages 18 to 24 (which is the focus of *Dropout Rates in the United States: 2001*), because a large share of 18- to 24-year-olds migrate across state lines each year. The high interstate migration rates of 18- to 24-year-olds confound the connection between state policies and programs and state dropout rates.

The inclusion of group quarters population in the 2006 American Community Survey could have a noticeable impact on the universe population for this age group. Therefore, the 2006 estimates might not be fully comparable to previous years.

SOURCES:
• Population Reference Bureau, analysis of data from the U.S. Census Bureau.
2006 data: 2006 American Community Survey Summary Tables, Table B14005.
2005 data: 2005 American Community Survey Summary Tables, Table B14005.
2004 data: 2004 American Community Survey Summary Tables, Table B14005.

2003 data: 2003 American Community Survey Summary Tables, Table PCT36.
2002 data: 2002 American Community Survey Summary Tables, Table PCT36.
2001 data: 2001 Supplementary Survey Summary Tables, Table PCT36.
2000 data: Census 2000 Supplementary Survey Summary Tables, Table PCT36.

7) **Percent of Teens Not Attending School and Not Working (ages 16–19)** is the percentage of teenagers between ages 16 and 19 who are not enrolled in school (full- or part-time) and not employed (full- or part-time). This measure is sometimes referred to as "Idle Teens" or "Disconnected Youth."

The inclusion of group quarters population in the 2006 American Community Survey could have a noticeable impact on the universe population for this age group. Therefore, the 2006 estimates might not be fully comparable to previous years.

SOURCES:
- Population Reference Bureau, analysis of data from the U.S. Census Bureau.
  2006 data: 2006 American Community Survey Summary Tables, Table B14005.
  2005 data: 2005 American Community Survey Summary Tables, Table B14005.
  2004 data: 2004 American Community Survey Summary Tables, Table B14005.
  2003 data: 2003 American Community Survey Summary Tables, Table PCT36.
  2002 data: 2002 American Community Survey Summary Tables, Table PCT36.
  2001 data: 2001 Supplementary Survey Summary Tables, Table PCT36.
  2000 data: Census 2000 Supplementary Survey Summary Tables, Table PCT36.

8) **Percent of Children Living in Families Where No Parent Has Full-Time, Year-Round Employment** is the share of all children under age 18 living in families where no parent has regular, full-time employment. This measure is very similar to the measure called "Secure Parental Employment," used by the Federal Interagency Forum on Child and Family Statistics in its publication, *America's Children: Key National Indicators of Well-Being.* For children living in single-parent families, this means the resident parent did not work at least 35 hours per week, at least 50 weeks in the 12 months prior to the survey. For children living in married-couple families, this means neither parent worked at least 35 hours per week, at least 50 weeks in the 12 months prior to the survey. Children living with neither parent also were listed as not having secure parental employment because those children are likely to be economically vulnerable.

SOURCE:

- Population Reference Bureau, special tabulations of data from the U.S. Census Bureau, Census 2000 Supplementary Survey; 2001 Supplementary Survey; and American Community Surveys for 2002 through 2006.

9) **Percent of Children in Poverty** is the share of children under age 18 who live in families with incomes below the U.S. poverty threshold, as defined by the U.S. Office of Management and Budget. The federal poverty definition consists of a series of income thresholds based on family size and composition and is updated every year to account for inflation. In 2006, the poverty threshold for a family of two adults and two children was $20,444. Poverty status is not determined for people in group quarters such as military barracks, prisons and other institutional quarters, or for unrelated individuals under age 15 (such as foster children). The data are based on income received in the 12 months prior to the survey.

SOURCES:

- Population Reference Bureau, analysis of data from the U.S. Census Bureau.
  2006 data: 2006 American Community Survey Summary Tables, Table B17001.
  2005 data: 2005 American Community Survey Summary Tables, Table B17001.
  2004 data: 2004 American Community Survey Summary Tables, Table B17001.
  2003 data: 2003 American Community Survey Summary Tables, Table P114.
  2002 data: 2002 American Community Survey Summary Tables, Table P114.
  2001 data: 2001 Supplementary Survey Summary Tables, Table P114.
  2000 data: Census 2000 Supplementary Survey Summary Tables, Table P114.

10) **Percent of Children in Single-Parent Families** is the percentage of children under age 18 who live with their own single parent either in a family or subfamily. In this definition, single-parent families may include cohabiting couples and do not include children living with stepparents. Children who live in group quarters (for example, institutions, dormitories, or group homes) are not included in this calculation.

SOURCES:

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- Population Reference Bureau, analysis of data from the U.S. Census Bureau.
  2006 data: 2006 American Community Survey Summary Tables, Table B23008
  2005 data: 2005 American Community Survey Summary Tables, Table B23008
  2004 data: 2004 American Community Survey Summary Tables, Table B23008.
  2003 data: 2003 American Community Survey Summary Tables, Table P063.
  2002 data: 2002 American Community Survey Summary Tables, Table P063.
  2001 data: 2001 Supplementary Survey Summary Tables, Table P063.
  2000 data: Census 2000 Supplementary Survey Summary Tables, Table P063.

ENDNOTES

1 O'Hare, William P., and Vicki L. Lamb, 2004, <u>Ranking the States Based on Improvement in Child Well-Being During the 1990s</u>, A KIDS COUNT Working Paper, The Annie E. Casey Foundation, Baltimore, MD. Available at <u>www.kidscount.org</u>.

2 Ibid.

3 O'Hare, William P., and Nicole L. Bramstedt, 2003, <u>Assessing the KIDS COUNT Composite Index</u>, A KIDS COUNT Working Paper, The Annie E. Casey Foundation, Baltimore, MD. Available at <u>www.kidscount.org</u>.

4 Mather, Mark, William O'Hare, and Dia Adams, 2007, <u>Testing the Validity of the KIDS COUNT State-Level Index of Child Well-Being</u>, A KIDS COUNT Working Paper, The Annie E. Casey Foundation, Baltimore, MD. Available at <u>www.kidscount.org</u>.

5 The Annie E. Casey Foundation, 2008, <u>KIDS COUNT Data Book</u>, The Annie E. Casey Foundation, Baltimore, MD. Available at <u>www.kidscount.org</u>.

6 Miringoff, Marc, and Marque-Luisa Miringoff, 2001, <u>The Social Health of the States</u>, Fordham Institute for Innovation in Social Policy, New York, NY.

7 Sharps-Burd, Sarah, Kristen Lewis, and Eduardo Borges Martins, 2008, <u>The Measures of America: American Human Development Report 2008-2009</u>, Social Science Research Council and Columbia University, New York, NY.

8 Land, Kenneth C., Vicki L. Lamb, and Sarah K. Mustillo, 2001, "Child and Youth Well-Being in the United States, 1975-1998; Some Findings from a New Index," <u>Social Indicators Research,</u> Vol. 56. pp 241-318

9 Hagerty, Michael R., and Kenneth C. Land, 2006, "Constructing Summary Indices of Quality of Life: A Model for the Effect of Heterogeneous Importance Weights," <u>Sociological Methods and Research</u> 35.

10 Savage, Sarah, 2008, <u>Children in Central Cities and Rural Communities Experience High Rates of Poverty,</u> Fact Sheet No. 12, Summer 2008, The Carsey Institute, University of New Hampshire, Durham, NH.

11 O'Hare, William P., and Nicole L. Bramstedt, 2003, <u>Assessing the KIDS COUNT Composite Index,</u> A KIDS COUNT Working Paper, The Annie. E. Casey Foundation, Baltimore, MD. Available at <u>www.kidscount.org</u>.

12 Land, Kenneth C., et al., 2008, <u>The 2008 Foundation for Child Development Child and Youth Well-Being Index (CWI) Report.</u> Available online at www.soc.duke.edu/~cwi/2008_FCD_CWI_Report.pdf.

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