

# The Facts That Matter

in Children's Health

The California Index of

Child and Youth Well-Being

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The California Index of Child and Youth Well-Being



Is the overall health and well-being of California's children improving or deteriorating? How has the status of children changed since the 1990s? How might the recent economic downturn affect the future of the state's children?

To help answer these critical questions, the Lucile Packard Foundation for Children's Health commissioned Kenneth Land, Ph.D., of Duke University, to create a California Index of Child and Youth Well-Being, summarizing trends over the past decade. The composite index is modeled after Dr. Land's national Child and Youth Well-Being Index (CWI), which has been released annually since 2004 by the New York-based Foundation for Child Development.

Based on data from the Lucile Packard Foundation for Children's Health website, www.kidsdata.org, the California Index combines 16 key indicators of child well-being into a summary index to track how children are faring over time. These indicators were grouped into five domains (education, health, etc.), and summary indices of changes over time were calculated for each domain, as well as for the overall Index.

Dr. Land's research also breaks out results by a variety of factors, including by locale for two of the state's major population centers (Los Angeles County and the Bay Area), by race/ethnicity, and by the five domains of well-being.

The research indicates that the health and well-being of children generally improved since the mid-90s, with some notable disparities remaining, but that the progress may be undermined by the recent economic downturn.

## **Key Results**

On the whole, results show that the well-being of children is getting better – in California, the Bay Area, and Los Angeles County. Using 1995 data as a base year with a score of 100, child well-being in California improved by about 16% from 1995 to 2006.

In the six-county Bay Area (Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties), child well-being also improved from its '95 base, but by a slightly smaller amount (14%) than the state.

In Los Angeles County, the 20% increase since '95 exceeded the state's rate of improvement.

#### What's Being Measured – Actual Well-Being or the Rate of Improvement?

The graph below measures the rate of improvement, meaning the base values – the 100% in '95 – are different for each region. These results, therefore, do not imply that child and youth well-being in the Bay Area was worse than California or Los Angeles County, but rather that the latter two regions made greater gains in child well-being as compared to their 1995 rates. The fact that the Bay Area achieved less overall progress is largely due to the higher levels of well-being in the Bay Area in the base year of '95 and the likelihood that improvements become more difficult to achieve at higher levels of well-being.

#### Index of Child and Youth Well-Being

California, the Bay Area and Los Angeles County



This graph shows the rate of improvement for the Child and Youth Well-Being Index for three regions: Los Angeles County, the Bay Area, and California. It's important to note that the starting points for these three regions – that is, the 100 value in 1995 – is relative to each region, meaning, for example, Los Angeles County and California didn't start at the same level.

## Other Notable Findings from This Study:

- Child well-being improved for all race/ethnicities that could be examined by available data (African American, Asian, Caucasian, and Latino). However, racial/ethnic disparities persisted over time.
   African American children, in particular, consistently fared worse than their Caucasians peers during the period studied.
- Children in California saw the biggest gains in the Safety/Behavioral Concerns domain (41% improvement), based on falling juvenile arrest and teen birth rates. But there was a noticeable decline of 21% in the Family Economic Well-Being domain, due to worsening trends in child poverty and housing affordability.
- In an effort to understand how the current economic recession could affect the well-being of children in California, this study also projected child poverty rates over the next few years. These estimates show that poverty may rise from 18.5% of California's children in 2008 to 27% in 2010, before falling to 24% in 2012, meaning the impact of the current economic recession likely will be long-lasting for California's children.

# What Is the California Index of Child and Youth Well-Being?

An index of child well-being is a summary measure of the status of children that provides insight into how child well-being has evolved over time. The index is constructed by aggregating results from a set of specific indicators of children's status. For decades, indices have been instrumental in monitoring economic trends (e.g., the Dow Jones Average, the Consumer Price Index). More recently, indices that measure quality of life have been developed, including by Duke professor Kenneth Land and associates, who created the national Child Youth and Well-Being Index (CWI) to track changes in some 28 indicators in the quality of life for U.S. children.

The California Index of Child and Youth Well-Being applies the national CWI to California, in order to assess how children overall in California – as well as in specific demographic groups and regions – have been faring.

#### Methodology: A Brief Overview

A full description of the methodology can be found at <a href="http://www.kidsdata.org/index">http://www.kidsdata.org/index</a>. Briefly, the construction of this index began with a review of more than 250 child and youth-related indicators available through kidsdata.org. From that group, 16 key indicators were chosen because of their consistency with the national Child Well-Being Index and because enough data points were available in the designated time period for each indicator to conduct a thorough analysis. While 16 indicators don't capture all aspects of child well-being, when grouped together as an index, these indicators generally track with the more robust 28-indicator national CWI, which is supported by rigorous research, and has been published in a peer-reviewed journal.

The year 1995 was set as the as the target base year for this benchmarking study with the goal of tracking trends for more than a decade, until 2006, the most current year for which the majority of data were available for the 16 indicators. Each key indicator then was assigned to one of five domains of child and youth well-being:

- Family Economic Well-Being
- Health
- Safety/Behavioral Concerns
- Educational Attainment
- Emotional Well-Being

These domains – or similar domains with different names – have been well-established in numerous well-being studies over the past three decades.

### The 16 Key Indicators that Compose the California Index of Child Well-Being

Domain	Indicator			
Family Economic Well-Being	Children in poverty Households that can afford to purchase a median-priced home			
Health	Infant mortality rate Infants born at low birth weight Child/youth death rate Injury hospitalization rate Asthma hospitalization rate Women receiving prenatal care in the first trimester			

Safety/Behavioral Concerns

Teen birth rate

Juvenile felony arrest rate

Juvenile felony drug and alcohol arrest rate

**Educational Attainment** High school graduates completing college preparatory courses

High school dropouts

Children with access to child care

**Emotional Well-Being** Youth suicide rate

Self-inflicted injury hospitalization rate

To calculate the overall score, each of the 16 indicators was indexed in reference to the base year (1995). The base year for that indicator was assigned a value of 100 and subsequent values were taken as percentage changes in the index from the base year. The directions of the indicators were oriented so that a value greater than 100 meant that the social condition improved and a value of less than 100 indicated the condition has deteriorated.

These 16 indicators were then grouped into the five domains of well-being, and each domain was assigned a value. Then, the five domain-specific indices were aggregated into an equally weighted composite index for each year.

The demographic indices are computed following the same procedures as the overall index. Composite indices are calculated separately for the four racial/ethnic groups examined in this study: African American, Asian, Latino, and Caucasian.

For a detailed overview of the methodology, including information about the methodology for the poverty projections and the racial/ethnic disparity indices, view the full report at <a href="http://www.kidsdata.org/index">http://www.kidsdata.org/index</a>

## Results by Domain of Well-Being

While conditions improved overall for California's children from 1995 to 2006, growth was uneven across the five domains of well-being that compose the overall index. Four of the five domains showed improvement. However, the Family Economic Well-Being domain declined from 1995 to 2006, due largely to the deteriorating rates of affordable housing and increasing rates of child poverty.

# Rate of Improvement/Decline from 1995 to 2006 for the Five Domain Indices of Well-Being that Compose the Overall Index:

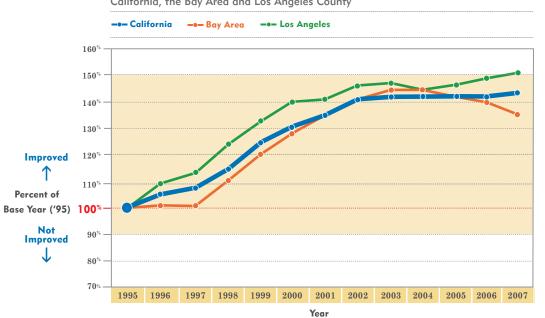
#### Improvement from Each Region's 1995 Base:

	CA	LA	Bay Area	1
Educational Attainment	+20%	+30%	+16%	
<b>Emotional Well-Being</b>	+24%	+23%	+15%	
Family Economic Well-Being	- 21%	-20%	-9%	
Health	+17%	+20%	+12%	
Safety/Behavioral Concerns	+41%	+49%	+40%	

The following graphs show the rate of improvement in each domain for three regions: Los Angeles County, the Bay Area, and California. It's important to note that the starting points for these three regions - that is, the 100 value in 1995 - is relative to each region, meaning, for example, that the Bay Area and California didn't start at the same level.

#### **Index of Safety and Behavioral Concerns**

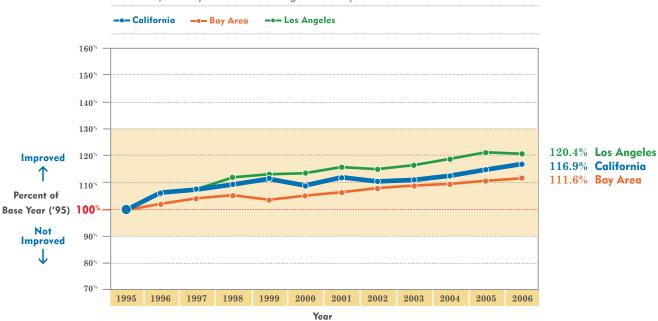
California, the Bay Area and Los Angeles County



 $150.6\% \;\; \textbf{Los Angeles}$ 143.4% California 135.8% Bay Area

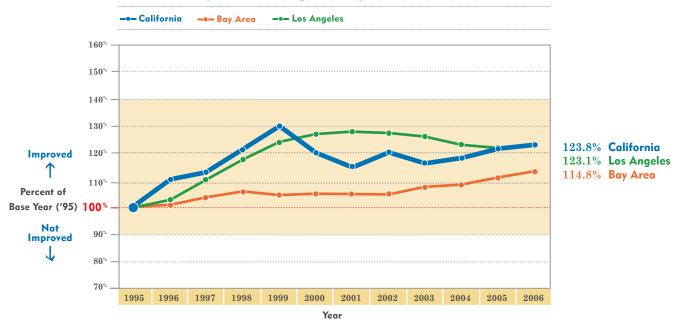
#### **Health Index**

California, the Bay Area and Los Angeles County



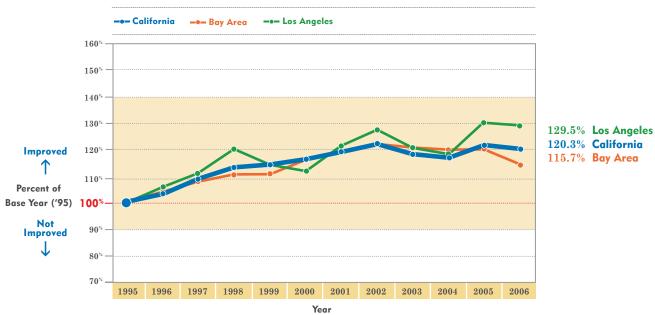
#### Index of Emotional Well-Being (Self-Inflicted Injuries and Suicides)

California, the Bay Area and Los Angeles County



#### **Index of Educational Attainment**

California, the Bay Area and Los Angeles County



#### **Index of Family Economic Well-Being**

California, the Bay Area and Los Angeles County



## Results by Race/Ethnicity

When applied to racial/ethnic groups for which enough data are available (African Americans, Asians, Latinos, and Caucasians), the California Index of Child and Youth Well-Being shows similar gains for these four groups, as the table below notes. However, rates of improvement were more variable at the regional level - in Los Angeles County and the Bay Area.

Rate of Improvement from 1995 to 2006 in the Child and Youth Well-Being Index, by Race/Ethnicity:

#### Improvement from Each Region's 1995 Base:

	CA	LA	Bay Area
African American	+13%	+14%	+3%
Asian	+15%	+19%	+15%
Latino	+ 12%	+13%	+9%
Caucasian	+12%	+15%	+10%

It's important to remember that the starting points – that is, the 100 value in 1995 – is relative to each race/ethnicity. This means that a 9% improvement for Latino children in the Bay Area doesn't necessarily mean that these children, on the whole, are faring better than African American children in the Bay Area, whose well-being improved by comparatively less, 3%. However, these results do indicate that Latino children in the Bay Area made more progress in well-being from 1995-2006 than African American children in the Bay Area.

The following graphs show the rate of improvement in the Child and Youth Well-Being Index for each race/ethnicity across three regions: Los Angeles County, the Bay Area, and California. Keep in mind the starting points for these three regions – that is, the 100 value in 1995 – is relative to each region, meaning, for example, that Latino children in California and Los Angeles didn't start at the same level.

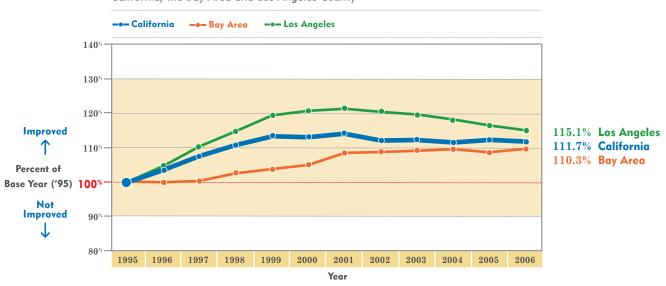
#### Index of Child and Youth Well-Being for Latinos

California, the Bay Area and Los Angeles County



#### Index of Child and Youth Well-Being for Caucasians

California, the Bay Area and Los Angeles County



**Note:** Since 2000, health-related data in California have distinguished multiracial groups from Caucasians. Any inconsistency before and after the year 2000 due to these categorical changes was not adjusted due to lack of available data. Thus, the Caucasian category from 1995 to 1999 includes multiracial groups.

#### Index of Child and Youth Well-Being for Asians

California, the Bay Area and Los Angeles County



#### Index of Child and Youth Well-Being for African Americans

California, the Bay Area and Los Angeles County



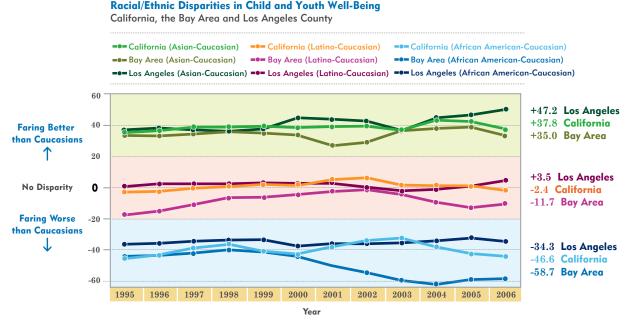
**Note:** The definitions of the racial/ethnic groups depend on the data sources, which sometimes vary. For example, some sources combine Filipinos and Pacific Islanders under "Asian" and other sources break out Pacific Islanders and Filipinos separately. Since 2000, health-related data in California have distinguished Pacific Islanders (but not Filipinos) from Asians. Any inconsistency before and after the year 2000 due to these categorical changes was not adjusted due to lack of available data. Thus, the Asian category from 1995 to 1999 includes Pacific Islanders.

#### Racial/Ethnic Disparities Among California's Children

In addition to measuring rates of improvement in overall child well-being, separate indices were created to measure disparities in levels of well-being among California's racial/ethnic groups.

Using these "disparity indices," there are some noticeable gaps between racial/ethnic groups – and these hold true across all three regions. Moreover, these disparities persisted over time, as the graph below shows.

In this graph, Caucasian children are used as the contrast group (although any racial/ethnic group could be used for comparative purposes) to illustrate how African Americans, Asians, and Latino children each compare to Caucasian children.



This graph shows disparities over time for each racial/ethnic group compared to Caucasians, in three regions: Los Angeles County, the Bay Area, and California. For example, Asian children consistently are faring better than Caucasian children, while African American kids consistently are faring worse.

If California's African American and Caucasian children were faring equally well over time, this graph would show a straight line at 0, signifying that neither race/ethnicity had an advantage over the other. The negative scores (represented by the blue lines) mean that there was a persistent disparity between the two race/ethnicities (-49 points in 1995 for California and just slightly better, -47 points, in 2006) with Caucasians consistently faring better. In Los Angeles County, the gap between African American and Caucasian children didn't improve much from 1995 to 2006, while in the Bay Area, the gap worsened, from -46 points in 1995 to -59 points in 2006.

However, the gap between Latino and Caucasian children (represented by the pink/orange lines) in California was not nearly so large (-2 points for Latinos in 2006, compared to -47 points for African American children). In Los Angeles County, Latino children fared slightly better than Caucasian children (+4 points) in 2006, and in the Bay Area, Latino children, on the whole, were faring worse in 2006 than Caucasian children (-12 points).

By contrast, Asian children (represented by the green lines) consistently fared better than Caucasian children – by about 38 points in California over the 11 years studied. Asian children in the Bay Area and Los Angeles County also were doing better than their Caucasian counterparts, according to this measure.

For details about how these race/ethnicity disparities were calculated visit http://www.kidsdata.org/index

# Projections of the Current Economic Recession

Given the likelihood that the current economic recession could have wide-ranging effects on child well-being, this study, in addition to examining trends from 1995 to 2006, also projects poverty rates through 2012 for the state, the Bay Area, and Los Angeles County.

In California in 2008, the most recent year for which data are available, 18.5% of children lived below the federal poverty level of roughly \$22,000 for a family of four. Using the economic projection methods noted in the methodology (http://www.kidsdata.org/index), the poverty rate is estimated to rise to a high of 27% in 2010, before falling to 24% in 2012, meaning the impact of the current economic recession likely will be long-lasting for California's children.

In Los Angeles County, the poverty rate was 21.9% in 2008 – and that rate is expected to climb to 35% in 2010, then decline to roughly 30-32% in 2012. This could mean that in the county that is home to more than 25% of California's children, nearly one out of every three kids will be living below the federal poverty level.

More modest increases in child poverty are projected for the higher-income Bay Area, where poverty rates ranged from roughly 8% to 13% in 2008, depending on the county. In the Bay Area, rates are expected to rise to 15-16% in 2010, and then decline slightly, to roughly 13-14% in 2012.

As noted previously in this report, California's Family Economics domain already was falling prior to 2006. Although it's impossible to determine just how much poverty will affect the overall California index, poverty rates are likely to weigh down what, at least until 2006, were general improvements in child well-being.

For details about how these projections were calculated visit http://www.kidsdata.org/index